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

COURSE SYLLABUS

Animal health and welfare

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. COURSE GOAL(s)

The goal of the course "**Animal health and welfare**" is to form a set of competence for students to solve professional tasks to optimize the conditions of feeding, watering and keeping animals in order to prevent diseases and increase the productivity of animals; the influence of a complex of environmental factors on the natural resistance of the body and the productive qualities of farm animals.

2. REQUIREMENTS FOR LEARNING OUTCOMES

Mastering the course "Animal health and welfare" is aimed at creating the following competencies (parts of competencies) for students:

Table 2.1. List of competences that students acquire through the course study

Competence code	Competence descriptor	Competence formation indicators (within this course)		
GPC-2	Is able to interpret and evaluate in professional activity the influence of natural, socio- economic, genetic and economic factors on the physiological state of the animal organism	GPC-2.1 Have knowledge of the influence of natural, socio-economic, genetic and economic factors on the animal body. GPC-2.2 Can establish the presence and validity of cause-effect relationships between the impact of certain etiological factors on the animal body and the development of diseases GPC-2.3 Knows the methods of preventive and therapeutic correction of the impact of unfavorable environmental factors that can cause deterioration of animal health		
GPC-6	Capable of analyzing, identifying, and assessing the risk of disease emergence and spread	GPC-6.1 Have knowledge of etiology and pathogenesis of animal diseases of different species. GPC-6.2 Know the laws of the emergence and spread of diseases in animal populations, predisposing factors to diseases and the causes of possible complications.		
PC-14	Willingness to promote veterinary knowledge, including animal disease prevention.	PC-14.3 Able to hold talks, lectures, seminars for employees of the organization to explain the principles of work on the prevention of animal diseases		

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course refers to the core/variable/<u>elective</u>* component of (B1) block of the higher educational programme curriculum.

* - Underline whatever applicable.

Within the higher education programme students also master other (modules) and / or internships that contribute to the achievement of the expected learning outcomes as results of the course study.

Table 3.1. The list of the higher education programme components/disciplines that contribute to the achievement of the expected learning outcomes as the course study results

Competence code	Competence descriptor	Previous courses/modules*	Subsequent courses/modules*
GPC-2	Is able to interpret and evaluate in professional activity the influence of natural, socio-economic, genetic and economic factors on the physiological state of the animal organism	Biology with the basics of ecology Veterinary genetics Breeding with the basics of private animal husbandry	the basics of forage production General and Veterinary
GPC-6	Capable of analyzing, identifying, and assessing the risk of disease emergence and spread	Veterinary genetics	Pathological physiology Epizootology and infectious diseases Clinical internship Industrial practice Academic research practice with the preparation of a scientific qualification project Preparation for and passing the state exam
PC-14	Willingness to promote veterinary knowledge, including animal disease prevention.		Pathological anatomy Clinical internship Industrial practice Academic research practice with the preparation of a scientific qualification project Preparation for and

4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the course "Animal health and welfare" is 5 credits.

*Table 4.1. Types of academic activities during the periods of higher education programme mastering (full-time training)**

Type of academic activities		Total academic	Semesters/training modules			
	* *		4	I	-	-
Contact academic hours		72	72	I	-	-
including						
Lectures	18	18	-	-	-	
Lab work		54	54	-	-	-
Seminars (workshops/tutorials)	-	-	-	-	-	
Self-study	88	88	-	-	-	
Evaluation and assessment (exa grading)	20	20	-	-	-	
Course workload	academic hours_	180	180	-	-	-
Course workhoau	credits	5	5	-	-	-

5. COURSE CONTENTS

Course module title	Course module contents (topics)	Academic activities types
Module 1. General hygiene	Topic 1.1. Air hygiene.	Lectures, Lab work.
	Topic 1.2. Hygiene of the microclimate.	Lectures, Lab work.
	Topic 1.3. Soil hygiene.	Lectures, Lab work.
	Topic 1.4. Hygiene of water supply.	Lectures, Lab work.
	Topic 1.5. Hygiene of feed.	Lectures, Lab work.
	Topic 1.6. Keeping animals.	Lectures, Lab work.
	Topic 1.7. Hygiene of pasture maintenance, transportation of animals and raw materials.	Lectures, Lab work.

	Topic 1.8. Hygiene of livestock	Lectures, Lab
	facilities.	work.
	Topic 1.9. Hygiene of sanitary	Lectures, Lab
	equipment.	work.
	Topic 1.10. Personal hygiene of	Lectures, Lab
	employees working with animals.	work.
	Topic 1.11. Environmental hygiene.	Lectures, Lab
		work.
Module 2. Private	Topic 2.1. Hygiene of cattle.	Lectures, Lab
hygiene		work.
	Topic 2.2. Hygiene of pigs and MRS.	Lectures, Lab
		work.
	Topic 2.3. Hygiene of horses.	Lectures, Lab
		work.
	Topic 2.4. Hygiene of poultry.	Lectures, Lab
		work.

6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

Table 6.1. Classroom	eauipment a	and technology	support requirements
	equipment	and rechnology	support requirements

Type of academic activities	Classroom equipment	Specialised educational / laboratory equipment, software, and materials for course study (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.	- Zoological models. - Information stands.
Lab work	An auditorium for laboratory work, individual consultations, routine monitoring and interim certification, equipped with a set of specialized furniture and equipment.	- Zoological models. - Information stands.
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 environment.	and	educational	

7. RESOURCES RECOMMENDED FOR COURSE STUDIES

Main readings:

- 1. Volkov G.K. Animal hygiene : textbook / G.K. Volkov, I.R. Smirnova. Electronic text data. St. Petersburg : Quadro, 2020. 504 p. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=487546&idb=0
- Workshop on animal hygiene : textbook / A.F. Kuznetsov, V.G. Tyurin, V.G. Semenov [et al.]; under the general editorship of A.F. Kuznetsov. 2nd ed., reprint. and additional ; Electronic text data. St. Petersburg : Quadro, 2020. 384 p. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=487551&idb=0

Additional Readings:

- 1. Chikalev A.I., Yuldashbayev Yu.A. ZOOHYENA. M.: GEOTAR-Media, 2012. 240 p.
- 2. V.A. Medvedsky Animal hygiene: textbook for students of specialty: "Veterinary medicine" of agricultural universities. Minsk: Technoprespectiva, 2009. 617 p.
- 3. Normative and zoohygenic requirements in animal husbandry: a practical guide / V.A. Medvedsky, D.G. Gotovsky et al. Vitebsk UO VGAVM, 2010. 343 p.
- 4. Kuznetsov A.F., Nikitin G.S. Modern technologies and hygiene of poultry keeping M.: Lan, 2012 352 p. <u>https://e.lanbook.com/book/3737</u>
- Hygiene of farm animals [Text] : In 2 hours: Methodological recommendations for laboratory and practical classes. Part 1 : Methods of monitoring the microclimate of livestock premises / M.S. Naydensky [et al.]; M.S.Naydensky et al. - 2nd ed., supplement and revision - M. : MGAVMiB named after K.I.Scriabin, 2001. – 110 p.
- Hygiene of farm animals [Text]: In 2 hours: Methodological recommendations for laboratory and practical classes. Part 2 : Zoohygenic control of soil, water and feed / M.S. Naidensky [et al.]; M.S.Naidensky et al. - M.: MGAVMiB named after K.I.Scriabin, 2002. -119 p.

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) <u>http://lib.rudn.ru/MegaPro/Web</u>

- 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" http://e.lanbook.com/
- 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 <u>https://www.google.ru/</u>

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

Training toolkit for self- studies to master the course *:

- 1. The set of lectures on the course «Animal health and welfare».
- 2. Laboratory workshop on the course «Animal health and welfare».
- 3. The guidelines for writing a course paper on the course **«Animal health and welfare».**

* The training toolkit for self- studies to master the course is placed on the course 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 UPON COURSE COMPLETION

The assessment toolkit and the grading system^{*} to evaluate the competences formation level (competences in part) upon the course study completion 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).

DEVELOPER:

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