Federal State Autonomous Educational Institution of Higher Education
PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA
RUDN University

Agrarian and Technological Institute

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

COURSE SYLLABUS

General surgery

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

The goal of the course "**General Surgery**" is the formation of a wide-profile specialist, the ability to perform not only complex surgical interventions, but also the ability to organize and conduct preventive and therapeutic measures.

2. REQUIREMENTS FOR LEARNING OUTCOMES

Mastering the course "**General Surgery**" 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)
PC-3	Ability to plan measures for differential diagnosis of diseases in a patient.	PC-3.1 Systematizes information about a patient's symptoms/syndromes, forms a set of preliminary diagnoses for further confirmation or refutation.
		PC-3.2 Uses a ready-made or creates a unique algorithm for differential diagnosis, taking into account the capabilities of the treatment facility.
		PC-3.3 Uses the information obtained as a result of diagnostic measures to make a final diagnosis(s) and to correct the diagnoses if necessary.
PC-6	Ability to diagnose and predict the course and spread of disease based on clinical, laboratory, and instrumental diagnostic data, as well as additional diagnostic methods.	PC-6.1 Knows the peculiarities of the manifestation of infectious, parasitic, internal non-contagious, surgical, gynecological and other diseases of animals of different species.
		PC-6.2 Knows how to make a complex diagnosis, taking into account the results of anamnesis, clinical, laboratory and instrumental studies.
		PC-6.3 Knows how to predict the course and result of treatment of the main disease based on the complex of concomitant diagnoses and factors that complicate the patient's condition.
		PC-6.4 Has knowledge of methodologies for assessing the risks of spread of an identified disease.
PC-12	Ability to organize and conduct dispensaries in animals, both general and specialized.	PC-12.1 Able to make a plan for the dispensary of animals, general or specialized, taking into account their

			species and purpose
			PC-12.2 Able to organize and conduct medical examinations according to the plan
			PC-12.3 Able, on the basis of the results of the dispensary, to make recommendations for therapeutic and preventive measures aimed at improving the health of the animal group

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course "**General Surgery**" refers to the core part of block B1 of the Educational Program of Higher Education.

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

Compe tence code	Competence descriptor	Previous courses/modules, internships*	Subsequent courses/modules, internships*
PC-3	Ability to plan measures for differential diagnosis of diseases in a patient.	Obstetrics, gynecology and andrology Internal diseases	Private Veterinary Surgery Parasitology and invasive diseases Anesthesiology, resuscitation and intensive care Dermatology Cardiology Endocrinology Nephrology Reconstructive surgery Veterinary ophthalmology Animal Dentistry Clinical internship Industrial practice Academic research practice with the preparation of a scientific qualification project Preparation for and passing the state exam
PC-6	Ability to diagnose and	Pathological anatomy	Private Veterinary Surgery

	predict the course and spread of disease based on clinical, laboratory, and instrumental diagnostic data, as well as additional diagnostic methods.	Obstetrics, gynecology and andrology Internal diseases	Parasitology and invasive diseases 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-12	Ability to organize and conduct dispensaries in animals, both general and specialized.	Obstetrics, gynecology and andrology Internal diseases	Private Veterinary Surgery Parasitology and invasive diseases 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 ACADEMIC ACTIVITIES

The total workload of the course "**General Surgery**" is 4 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 hours	Semesters/training modules			
			7	-	-	-
Contact academic hours		72	72	-	-	-
including						
Lectures		17	17	**-**	**-**	**-**
Lab work		51	51	**-**	**-**	**-**
Seminars (workshops/tutorials)		**-**	**-**	**-**	**-**	**-**
Self-study		56	56	**-**	**-**	**-**
Evaluation and assessment (exam/pass/fail grading)		20	20	-	-	-
Course workload	academic hours	**144**	**144**	**-**	**-**	**-**
	credits	**4**	**4**	**-**	**-**	**-**

5. COURSE CONTENTS

Table 5.1. Course contents and academic activities types

Course module title	Course module contents (topics)	Academic activities types
Module 1. Inflammation. Surgical infection.	Topic 1.1 Trauma. Traumatic illness	Lectures, Lab work.
	Topic 1.2 Diagnosis of inflammatory processes.	Lectures, Lab work.
	Topic 1.3 Features of the course of inflammatory processes in the skin, subcutaneous fat, muscles, tendon-ligamentous apparatus, body cavities.	Lectures, Lab work.
	Topic 1.4 Surgical infection. Local manifestations.	Lectures, Lab work.
	Topic 1.5 Surgical infection. Systemic manifestations.	Lectures, Lab work.
	Topic 1.6 Treatment of inflammatory processes by methods of etiotropic and pathogenetic therapy.	Lectures, Lab work.
Module 2. Closed mechanical damages.	Topic 2.1 Classification of closed mechanical damages.	Lectures, Lab work.
	Topic 2.2 Methods of diagnosis of ZMP.	Lectures, Lab work.
	Topic 2.3 Differential diagnosis of hematomas, extravasates, abscesses.	Lectures, Lab work.
	Topic 2.4 Bone injuries. Injuries of the tendon-ligamentous apparatus.	Lectures, Lab work.
	Topic 2.5 Injuries of soft tissues and internal organs.	Lectures, Lab work.
Module 3. Biology of the wound process.	Topic 3.1 Types of wounds, features of diagnosis and treatment of certain types of wounds.	Lectures, Lab work.
	Topic 3.2 Drains, types, methods of setting drains.	Lectures, Lab work.
	Topic 3.3 Granulation tissue.	Lectures, Lab work.
	Topic 3.4 Features of the wound process in different animal species.	Lectures, Lab work.
	Topic 3.5 Features of wound treatment and complications.	Lectures, Lab work.

6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

Table 6.1. Classroom equipment and technology 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.	*-Surgical instruments*
Laboratory	An auditorium for laboratory work, individual consultations, routine monitoring and interim certification, equipped with a set of specialized furniture and equipment.	*-Surgical instruments*
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:
1. General veterinary surgery: textbook / S.V. Pozyabin, Yu.I. Filippov, N.A. Kozlov [et al.]; under the general editorship of S.V. Pozyabin. - Moscow: Kolos-s, 2019. – 762 p.
2. Vasiliev V.K. General surgery: textbook / V.K. Vasiliev, A.P. Popov, A.D. Tsybikzhapov. - St. Petersburg : Publishing house "Lan", 2014. - 272 p.

Additional Readings:
1. Surgical methods of injury prevention: an educational and methodological manual on the courses "General and private surgery", "Veterinary surgery" / Yu.A. Vatnikov, V.I. Parshina, E.V. Kulikov [et al.]. - Electronic text data. - Moscow: RUDN, 2018. - 26 p.
2. Closed mechanical injuries in animals: an educational and methodological manual on the courses "General and private surgery", "Veterinary surgery" / Yu.A. Vatnikov, V.I. Parshina, E.V. Kulikov [et al.]. - Electronic text data. - Moscow: RUDN, 2018. - 23 p.
3. Basic methods of treatment of open mechanical injuries: an educational and methodical manual on the courses "General and private surgery", "Veterinary surgery" / Yu.A. Vatnikov, V.I. Parshina, E.V. Kulikov [et al.]. - Electronic text data. - Moscow: RUDN, 2018. - 21 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) http://lib.rudn.ru/MegaPro/Web
- EL "University Library Online" http://www.biblioclub.ru
- EL "Yurayt" http://www.biblio-online.ru

- EL "Student Consultant" www.studentlibrary.ru
- 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 https://www.google.ru/
- 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 "**General Surgery**".
2. Laboratory workshop on the course "**General Surgery**".

* 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:

Senior lecturer of the Department of Veterinary Medicine		Troshina N.I.
Position, Basic curriculum	Signature	Full name.

HEAD OF EDUCATIONAL DEPARTMENT:

Department of Veterinary Medicine		Vatnikov Yu.A.
Name Basic Curriculum	Signature	Full name.

**HEAD OF
HIGHER EDUCATION PROGRAMME:**

Director of the Department of Veterinary Medicine		Vatnikov Yu.A.
Position, Basic curriculum	Signature	Full name