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:

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:

Competence	Competence descriptor	Competence formation indicators
code	Competence descriptor	(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

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

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	Obstetrics, gynecology and andrology	Parasitology and invasive diseases
	on clinical, laboratory,	Internal diseases	Epizootology and
	and instrumental		infectious diseases
	diagnostic data, as well		Clinical internship
	as additional diagnostic		Industrial practice
	methods.		Academic research
			practice with the
			preparation of a scientific
			qualification project
			Preparation for and passing
			the state exam
	Ability to organize and	Obstetrics, gynecology	Private Veterinary Surgery
	conduct dispensaries in	and andrology	Parasitology and invasive
	animals, both general	Internal diseases	diseases
	and specialized.		Clinical internship
			Industrial practice
PC-12			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	Semesters/training modules			
		hours	7	-	-	-
Contact academic hours		68	68	-	-	-
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	-	-	-
Course workloau	credits	4	4	-	-	-

5. COURSE CONTENTS

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

Table 5.1. Course contents and academic activities types

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)
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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:

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

- EL "University Library Online" <u>http://www.biblioclub.ru</u>
- 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 Position, Basic curriculum

Signature

Troshina N.I. Full name

HEAD OF EDUCATIONAL DEPARTMENT:

Department of Veterinary Medicine Name Basic Curriculum

Vatnikov Yu.A. Full name.

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

Signature

Signature

Vatnikov Yu.A. Full name