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

Reconstructive 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

2025

1. GOALS AND OBJECTIVES OF THE COURSE

The aim of mastering the course "**Reconstructive surgery**" is to provide students with theoretical knowledge, practical skills and skills in the diagnosis and surgical treatment of complex defects requiring reconstruction.

2. REQUIREMENTS FOR LEARNING OUTCOMES

The implementation of the course "**Reconstructive surgery**" 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 course)

Competence code	**Competence descriptor**	**Competence formation indicators** (within this course)
PC-3	Ability to plan activities for differential diagnosis of diseases in a patient.	PC-3.1 Systematizes information about symptoms/syndromes of the disease in the patient, forming a set of preliminary diagnoses for further confirmation or refutation.
		PC-3.2 Uses an existing or develops a unique algorithm for differential diagnosis, taking into account the capabilities of the medical facility.
		PC-3.3 Uses the information obtained from diagnostic activities to establish a final diagnosis (diagnoses) and correct the established diagnoses if necessary.
PC-5	Ability and readiness to plan and conduct the necessary types of instrumental diagnostics of the patient's condition.	PC-5.2 Selects the necessary and sufficient set of instrumental diagnostic methods to solve the assigned task.
		PC-5.3 Is able to conduct instrumental diagnostics of animal diseases.
		PC-5.4 Interprets diagnostic results and uses them to solve the assigned task.
PC-9	Ability to use surgical methods in the prevention, diagnosis, and treatment of animal diseases.	PC-9.1 Selects the necessary method of surgical intervention, including, if necessary, methods of anesthesia.

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course "**Reconstructive surgery**" belongs to the part formed by the participants of educational relations of the block B1 of the Educational Program of Higher Education.

As part of the Educational Program of Higher Education, students also master other courses and /or practices that contribute to achieving the planned results of mastering the course "**Reconstructive surgery**".

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

Competence code	**Competence descriptor**	**Previous courses/modules, internships***	**Subsequent courses/modules, internships***
PC-3	Ability to plan activities for differential diagnosis of diseases in a patient.	Obstetrics, Gynecology and Andrology / Акушерство, гинекология и андрология Internal Diseases / Внутренние незаразные болезни General Surgery / Общая хирургия Private Surgery / Частная ветеринарная хирургия Parasitology and Invasive Diseases / Паразитология и инвазионные болезни Dermatology / Дерматология Cardiology / Кардиология Endocrinology / Эндокринология Oncology / Онкология Neurology / Неврология Nephrology / Нефрология	Veterinary Ophthalmology / Ветеринарная офтальмология Behavioral Medicine / Поведенческая медицина Animal Dentistry / Стоматология животных Variable component / Вариативная компонента Clinical Industrial Practice / Клиническая производственная практика Clinical Internship Industrial Research Practice / Производственно-исследовательская практика Preparation for Passing and Passing the State Exam / Подготовка к сдаче и сдача государственного

		Anesthesiology, Resuscitation And Intensive Therapy / Анестезиология, реанимация и интенсивная терапия	экзамена Preparing and Passing the State Exam / Подготовка и сдача государственного экзамена Design, Preparation for Defense Procedure and Defense of the Graduation Thesis / Оформление, подготовка к процедуре защиты и защита выпускной квалификационной работы
PC-5	Ability and readiness to plan and conduct the necessary types of instrumental diagnostics of the patient's condition.	Instrumental Diagnostic Methods with Elements of Artificial Inteligence Technology / Инструментальные методы диагностики с элементами технологии искусственного интеллекта Veterinary Assistant Skills / Навыки ассистента ветеринарного врача Dermatology / Дерматология Cardiology / Кардиология Endocrinology / Эндокринология Oncology / Онкология Neurology /	Veterinary Ophthalmology / Ветеринарная офтальмология Animal Dentistry / Стоматология животных Variable component / Вариативная компонента Clinical Industrial Practice / Клиническая производственная практика Clinical Internship Industrial Research Practice / Производственно-исследовательская практика Preparation for

		Неврология Nephrology / Нефрология	Passing and Passing the State Exam / Подготовка к сдаче и сдача государственного экзамена Preparing and Passing the State Exam / Подготовка и сдача государственного экзамена Design, Preparation for Defense Procedure and Defense of the Graduation Thesis / Оформление, подготовка к процедуре защиты и защита выпускной квалификационной работы
PC-9	Ability to use surgical methods in the prevention, diagnosis, and treatment of animal diseases.	Operative Surgery with Topographic Anatomy / Оперативная хирургия с топографической анатомией	Veterinary Ophthalmology / Ветеринарная офтальмология Animal Dentistry / Стоматология животных Variable component / Вариативная компонента Clinical Industrial Practice / Клиническая производственная практика Clinical Internship Industrial Research Practice /

			Производственно-исследовательская практика Preparation for Passing and Passing the State Exam / Подготовка к сдаче и сдача государственного экзамена Preparing and Passing the State Exam / Подготовка и сдача государственного экзамена Design, Preparation for Defense Procedure and Defense of the Graduation Thesis / Оформление, подготовка к процедуре защиты и защита выпускной квалификационной работы

4. COURSE WORKLOAD AND TRAINING ACTIVITIES

Course workload of the course "**Reconstructive surgery**" is 2 credits.

*Table 4.1. Types of academic activities during the period of the HE program mastering for **full-time** study*

Types of academic activities	**HOURS**	**Semesters**			
		9	-	-	-
Contact academic hours	51	51	-	-	-
including					
Lectures	-	-	-	-	-
Lab work	-	-	-	-	-
Seminars (workshops/tutorials)	17	17	-	-	-
Self-study	46	46	-	-	-
Evaluation and assessment (exam/pass/fail grading)	9	9	-	-	-

Course workload	Academic hour	**72**	**72**	-	-	-
	Credit unit	**2**	**2**	-	-	-

5. COURSE CONTENTS

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

Modules	**Content of the modules (topics)**	**Types of academic activities**
Module 1. Traumatology and orthopedics.	Topic 1.1 Classification of fractures.	Lectures, Lab work.
	Topic 1.2 Osteosynthesis.	Lectures, Lab work.
	Topic 1.3 Arthrodesis. Corrective osteotomy.	Lectures, Lab work.
Module 2. Thoracic and abdominal surgery.	Topic 2.1 Thoracic reconstructive surgery.	Lectures, Lab work.
	Topic 2.2 Abdominal reconstructive surgery.	Lectures, Lab work.
Module 3. Operations in the head and neck.	Topic 3.1 Reconstructive and reconstructive surgery of the facial part of the skull.	Lectures, Lab work.
	Topic 3.2 Reconstructive and reconstructive surgery of the cerebral part of the skull.	Lectures, Lab work.
	Topic 3.3 Reconstructive and reconstructive surgery in the neck.	Lectures, Lab work.
Module 4. Neurosurgery.	Topic 4.1 Methods of surgical treatment for injuries of the central and peripheral nervous system.	Lectures, Lab work.
		Lectures, Lab work.
		Lectures, Lab work.
Module 5. Plastic surgery.	Topic 5.1 Soft tissue surgery.	Lectures, Lab work.
	Topic 5.2 Plastic surgery in oncology.	Lectures, Lab work.
	Topic 5.3 Skin plastic surgery.	Lectures, Lab work.

6. COURSE EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

Table 6.1. Material and technical support of the course

Classroom for Academic Activity Type	***Equipping the classroom***	**Specialized educational/laboratory equipment, software and materials for the development of the course** (if necessary)
Seminar Room	A classroom for conducting seminar-type classes, group and individual consultations, ongoing assessments, and interim certification, equipped with specialized furniture and multimedia presentation equipment.	*-Information stands* *-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. Instruments and equipment of veterinary surgery. History and modernity : a textbook / N.V. Sakhno, Yu.A. Vatnikov, S.A. Yagnikov [et al.] ; under the general editorship of N.V. Sakhno. - St. Petersburg : Lan, 2021. - 152 p.

Additional Readings:

1. Tools and equipment in veterinary surgery. History and modernity [Electronic resource] : Textbook / N.V. Sakhno [et al.]; Under the general editorship of N.V. Sakhno. - St. Petersburg : Publishing House "Lan", 2017. - 152 p. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=465007&idb=0
2. Videnin V.N. Surgical treatment of abdominal wall defects in animals [Electronic resource] : Textbook / V.N. Videnin, B.S. Semenov. - St. Petersburg : Publishing house "Lan", 2015. - 224 p. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=465109&idb=0
3. Shakurov M.Sh. Fundamentals of general veterinary surgery [Electronic resource] : Textbook / M.Sh. Shakurov. - 2nd ed., erased. - St. Petersburg : Publishing House "Lan", 2016. - 252 p. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=465067&idb=0

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/

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

1. A course of lectures on the course "**Reconstructive surgery**".
2. Laboratory workshop on the course "**Reconstructive surgery**".

* - 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).

DEVELOPER:

Professor of the Department of Veterinary Medicine		Vatnikov Yu.A.
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