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

COURSE SYLLABUS

Operative Surgery with Topographic Anatomy

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 "**Operative surgery with topographic anatomy**" is to give future veterinarians theoretical knowledge, practical skills and skills in the technology of organizing and conducting surgical operations; theoretical knowledge, practical skills in choosing the optimal methods of surgical intervention and ways to prevent complications.

2. REQUIREMENTS FOR LEARNING OUTCOMES

Mastering the course "**Operative surgery with topographic anatomy**" is aimed at creating the following competencies (parts of competencies) for students:

| Competence | Competence descriptor | Competence formation indicators | |
|---|---------------------------------|---|--|
| code | | (within this course) | |
| Able to determine the | | GPC-1.4 Knows how to take samples of | |
| GPC-1 | biological status and normative | biological fluids and tissues for research, | |
| 010-1 | clinical indicators of animal | how to perform laboratory research, | |
| | organs and systems | interpretation of research results. | |
| | Ability to use methods of | PC-9.1 Selects the necessary method of | |
| | operative surgery in the | surgical intervention, including methods | |
| prevention, diagnosis and treatment of animal diseases. | | of anesthesia if necessary. | |
| | | PC-9.2 Plans preoperative preparation, | |
| | | the course of surgical intervention, the | |
| | | management of the early postoperative | |
| | | period, and the prevention of | |
| | | complications. | |
| PC-9 | | PC-9.3 Able to independently perform | |
| | | basic preventive, diagnostic and | |
| | | therapeutic surgical interventions | |
| | | (including punctures, soft tissue | |
| | | necrectomies, tail amputations, castration | |
| | | of males and females, dehorning, | |
| | | diagnostic laparotomies, etc.) | |
| | | PC-9.4 Controls the result of surgical | |
| | | intervention. | |

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

3.COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course refers to the <u>core</u>/variable/elective* 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, internships* | Subsequent courses/modules, internships* |
|-----------------|--|--|---|
| GPC-1 | Able to determine the biological status and normative clinical indicators of animal organs and systems | Clinical diagnostics | Clinical laboratory diagnostics Laboratory diagnostics of infectious and invasive diseases Study practice Clinical internship Industrial practice Academic research practice with the preparation of a scientific qualification project Preparation for and passing the state exam |
| PC-9 | Ability to use methods of operative surgery in the prevention, diagnosis and treatment of animal diseases. | | Anesthesiology, resuscitation and intensive care 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 |

4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the course "**Operative surgery with topographic anatomy**" 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 | | | |
|--|----------------|-------------------------|----------------------------|---|---|---|
| | | | 6 | - | = | - |
| Contact academic hours | | 68 | 68 | - | - | - |
| including | | | | | | |
| Lectures | | 17 | 17 | - | _ | - |
| Lab work | | 51 | 51 | - | - | - |
| Seminars (workshops/tutorials) | | - | - | - | - | - |
| Self-study | | 66 | 66 | - | - | - |
| Evaluation and assessment (exam/pass/fail grading) | | 10 | 10 | - | - | - |
| | academic hours | 144 | 144 | - | - | - |
| Course workload | 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. General concepts and methods of operative surgery. | Topic 1.1 General concepts of operative surgery, (surgical clinic, surgical manipulations, surgical operation). | Lectures, Lab work. | |
| | Topic 1.2 Fixation of animals, anesthesia, local anesthesia. | Lectures, Lab work. | |
| | Topic 1.3 Surgical instruments. | Lectures, Lab work. | |
| | Topic 1.4 Methods of asepsis and antiseptics in operative surgery. | Lectures, Lab work. | |
| | Topic 1.5. Separation of tissues. Bleeding, types, methods of stopping. | Lectures, Lab work. | |
| | Topic 1.6. General principles of surgical suture application. | Lectures, Lab work. | |
| | Topic 1.7. Desmurgy. | Lectures, Lab work. | |
| Module 2.Methods andfeaturesofsurgical | Topic 2.1. Operational access. | Lectures, Lab work. | |
| operations. | Topic 2.2. Operational techniques, types, methods, features. | Lectures, Lab work. | |
| | Topic 2.3. Features of oncological operations. Principles of ablasty. | Lectures, Lab work. | |
| | Topic 2.4. Connection of soft tissues. The final stage of the operation. | Lectures, Lab work. | |
| | Topic 2.5. The connection of dense | Lectures, Lab | |

6. 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 |
| LaboratoryLab workLaboratory | 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. | - |

Table 6.1. Classroom equipment and technology support requirements

7. RESOURCES RECOMMENDED FOR COURSE STUDIES

Main readings:

- Shakurov M.S. Fundamentals of general veterinary surgery [Electronic resource] : Textbook / M.S. Shakurov. - 2nd ed., erased. - St. Petersburg : Publishing House "Lan", 2016. - 252 p. <u>http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=465067&idb=0</u>
- 2. 2. Petrakov K.A. Salenko P.T. Paninsky S.M. Operative surgery with animal anatomy. -2nd ed. Moscow: KolosS, 2013. 453 p.
- Semenov B. S., Videnin V. N., Nechaev A. Yu., Kuznetsova T. S., Guseva V. A. Operative surgery in animals 2021.-704 p. <u>https://e.lanbook.com/book/162365</u> *Additional Readings:*

- 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
- 2. Local anesthesia and methods of novocaine therapy of animals [Electronic resource] : Educational and methodical manual / A.F. Sapozhnikov [et al.]. St. Petersburg : Publishing House "Lan", 2011. 176 p. <u>http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=465268&id b=0</u>
- Semenov B.S. Practicum on operative surgery with the basics of topographic anatomy of domestic animals [Electronic resource] / B.S. Semenov, V.A. Ermolaev, S.V. Timofeev. - M. : KolosS, 2013. - 263 p. <u>http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=475874&idb=0</u>

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" <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 <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 "**Operative surgery with topographic** anatomy".
- 2. Laboratory workshop on the course "**Operative surgery with topographic anatomy**".

* 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).

DEVELOPERS:

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