

**LITHUANIAN UNIVERSITY OF HEALTH SCIENCES  
VETERINARY ACADEMY, FACULTY OF VETERINARY MEDICINE,  
THE DESCRIPTION OF PROCEDURE OF CLINICAL ROTATION FOR  
STUDENTS IN THE VETERINARY MEDICINE STUDY PROGRAMME**

**I. GENERAL PART**

1. The procedure of Formation of Clinical Rotation of the Student of the Study Programme of Veterinary Medicine (VM) in the Faculty of Veterinary medicine (FVM) , Veterinary Academy (VA), Lithuanian University of Health Sciences (hereinafter Procedure) was prepared with reference to the following documents:

1.1. Law on the Amendment of the Law on Higher Education and Research of the Republic of Lithuania No. XI-242 (29/06/2016. No. XII-2534);

1.2. Regulation of the Studies at the LSMU, approved by the Decree No. 148-03 of the Senate of the LSMU on 22th of April, 2021;

1.3. Law on Veterinary Activities of the Republic of Lithuania (17/12/1991, No. I-2110);

1.4. Description of Veterinary Study Field (Decree of Minister of Education, Science and Sport No V-1687, 4/11/2020)

1.5. Manual of Standard Operating Procedure (SOP) as amended in September 2021 (ESEVT SOP 2019 – 05-30);

1.6. Results of Veterinary medicine study programme (confirmed at 08/06/2021 of LSMU VF 10-10);

2. This procedure defines organisation, implementation and submission of clinical rotation of third, fourth and fifth year students ‘of LSMU VA Veterinary medicine study programme at the

Dr. L. Kriaučeliūnas Small Animal Clinic (hereinafter KRSAC), Large Animal Clinic (hereinafter LAC), Center of Veterinary Medicine Simulation (hereinafter VMSC), Public Institution Practical training and trial center of Lithuanian University of Health Sciences (hereinafter PTTC) and other bases of formation of veterinary medicine practical skills (hereinafter Bases).

3. The formation of clinical rotation shall be organized by the Coordinators of the module or subject of the responsible departments, and schedules are administered by Coordinator of the clinical rotation approved by the LSMU VF Council.

**II. BASIC CONCEPTS**

4. **Clinical rotation** (hereinafter Rotation) – obligatory part of gain of practical clinical competencies in VM study programme clinical modules: Propedeutics, Radiobiology and Diagnostic Imaging and Propedeutics, Clinical Pathology and Diagnostic Imaging, Small Animal Internal Diseases, Large Animal Internal Diseases, Small Animal General Surgery and Anesthesiology, Large Animal General Surgery and Anesthesiology, Small Animal Surgery, Large Animal Surgery, Animal Obstetrics, Reproductive Disorders and Clinical Rotation. Its form, duration and deadlines are defined by the curriculum of VM programme.

5. **Coordinator of the clinical rotation** (hereinafter Coordinator) – employee FVM of the LSMU VA responsible for the organization of students’ practical skills formation). The FVM lecturer recommended by the responsible FVM unit and appointed by the FVM dean’s decree upon consent of the LSMU Rector, who has a qualification of veterinary surgeon.

6. **Supervisor of the clinical rotation** (hereinafter Supervisor) – veterinary surgeon/lecturer employed at LSMU FVM or at base of Rotation approved by the LSMU VF Council, who has work experience of at least 3 years, is responsible for implementation VM study programme students' formation of Rotation and gain of clinical competencies. Note: *in practica.lsmuni.lt Supervisor is marked as Practice Mentor.*

7. **Base of clinical rotation** (hereinafter Bases) – KRSAC, LAC, VMSC, PTTC other bases of formation of veterinary medicine clinical rotation (hereinafter Bases).

8. **Electronic Clinical Rotation Logbook** (hereinafter - e-Logbook) – competencies acquired by VM students during their studies are placed in the LSMU Praktiku Sistema (praktika.lsmuni.lt).

### III. THE AIM OF FORMATION OF CLINICAL ROTATION

9. To create conditions for students to get practical/professional competencies necessary for study programme results, which are gained when studying Propedeutics, Radiobiology and Diagnostic Imaging, Propedeutics, Clinical Pathology and Diagnostic, Internal Diseases of Small Animals and Internal Diseases of Large Animals, Small Animal General Surgery and Anesthesiology, Large Animal General Surgery and Anesthesiology, Obstetrics and Reproductive Disorders of Small and Large Animals, Surgery of Small Animals and Surgery of Large Animals, achievement and acquirement of qualification of veterinary surgeon.

### IV. THE RESULTS OF CLINICAL ROTATION

10. **The third year veterinary medicine student after successful completion of Propedeutics, Radiobiology and Diagnostic Imaging and Propedeutics, Clinical Pathology and Diagnostic Imaging modules** shall be able: to ensure and control requirements of bio-safety, to communicate ethically with owners of patients, colleagues and veterinarians, teachers, to restrain animals, to evaluate animal's behaviour and physiological and body condition while walking, install and to collect anamnesis, to fill patient's registration card; to perform general clinical examination, to measure body temperature, respiration rate and heart activity, to assess physiological parameters, clinical signs and symptoms of animal, to take samples of blood, urine and other biological fluids, to prepare sample of blood smear and evaluate it, to perform biochemical and morphological blood tests, to prepare skin's scrapes, to take samples for bacteriological, mycological and parasitological tests properly, to assess and interpret the received results; to prepare the appropriate tools for performing diagnostic tests; to perform visual diagnostic tests and evaluate their results.

11. **The fourth year veterinary medicine student successfully completed studies of Small Animal Internal Diseases module** shall be able: to provide first veterinary aid to animals, to collect detailed medical history by questioning the owner of patient, to perform general and special examination of small animal, to take, of urine, blood, skin's scrapes and other samples of biological fluids tests; to perform diagnostic, instrumental tests, evaluate and interpret received results of tests; to diagnose diseases according to results of performed tests, to interpret results correctly; to create treatment plan based on test results and prescribe the treatment with regard to animal's general condition, chronic diseases, age, and possibilities of animal's owner; to assign medicine purposefully, reasonably and with regard to animal's general condition, activity of other organs and systems, possible adverse reactions; to prescribe only registered veterinary medical products for the treatment of animals, to ensure that waste of veterinary medical products is stored and disposed safely, in accordance with Lithuanian and European Union legislation and guidelines, to record and report about suspected adverse reactions of the veterinary medicinal substances; to select medicine properly, to calculate dosage of the drug, to prescribe a prescription, to inject medicine subcutaneous, intramuscular, intravenous, to prepare and install drip infusion, to insert intravenous catheter, to perform procedures of animal's nail clipping and ear cleaning, to perform urinary catheterization procedure, to evaluate results' of performed X-ray, ultrasonic and endoscopic tests, to perform and interpret electrocardiogram; to analyze and summarize information, to learn how to select the most

suitable treatment for animal, to organize appropriate tests, to be able to work in a team, to complete the necessary documents in daily work at clinic, to gain independent study skills.

12. **The fourth year veterinary medicine student successfully completed studies of Large Animal Internal Diseases module** shall understand the principles of effective interpersonal interaction, based on humanism and respect to human freedom and animal welfare, veterinary legal standards and professional ethics; to allocate appointments, to take the animals to the clinic and ensure appropriate care of them; to take care of animal, to recognize and describe the ways of diseases' appearance and their course, severity of clinical signs; to give medicine prescribed by the veterinary surgeon to the client and to explain how to use and keep them safely; to prepare animals for medical procedures and tests properly, to provide veterinary first aid, to assess clinical condition of animal, to maintain basic vital functions and to perform initial differential diagnosis; to take samples for various laboratory tests, to carry out blood, urine and other tests using clinic based equipment, and to interpret tests' results; to evaluate the diet of animals and advice to the owner of animal how to prepare and use feed correctly; to use only licensed medicine and to prescribe them responsibly, in accordance with the requirements of legislation, to know the requirements of the use of medicine in Lithuania and the European Union, to ensure proper storage of medicines and their residues; to calculate appropriate dose of the drug and give or inject it to the animal, to give medicine, prescribed by the veterinary surgeon, to the client and to explain how to use and keep them safely.

13. **The fourth year veterinary medicine student successfully completed studies of Small Animal General Surgery and Anesthesiology module** shall be able: practice safe surgical technique and hygiene in small animal surgery. Apply aseptics and antiseptics in surgery. Be able to prepare and insert an endotracheal tube; prepare and insert an intravenous catheter for a procedure; fill in an anaesthetic protocol; calculate doses of anaesthetic drugs. Apply analgesia preoperatively, intraoperatively and postoperatively. Perform tissue dissection, stop bleeding, wound suturing. Be able to suture internal parenchymal and tubular organs, surgical incision. Be able to select the appropriate suture materials. Able to perform injections, punctures and infusions. Recognise surgical infections. Open mechanical injuries (wounds). Closed mechanical injuries. Thermal and chemical injuries. Foreign bodies and the body's reaction to them. Surgical treatment of necrotised areas, ulcers, fistulas.

14. **The fourth year veterinary medicine student successfully completed studies of Large Animal General Surgery and Anesthesiology module** shall be able: to properly prepare and insert the endotracheal tube; to perform the preparation and insertion of the intravenous catheter; to complete the anesthetic protocol; to determine the appropriate dosage of an anesthetic medication.

15. **The fifth year veterinary medicine student after successful completion of Small Animal Surgery module** shall be able: to work in team and individually, to provide veterinary first aid in extreme conditions, to perform analysis of orthopedic/neurologic and ophthalmic examination, to measure, to select appropriate diagnostic tests to diagnose particular disease: to position animal during X-ray and ultrasound examination, to perform these examinations and interpret images of tests, to select anesthetics correctly and to create and fill anesthesia protocol for dog and cat, to know how to prepare hands and surgery field, to connect/disconnect patient to/from anesthesia and monitoring machines, to observe and interpret condition of animal during and after surgery, to perform extubation of animal, to complete case histories, clinical documents and to write a drug prescriptions, to be able to perform intubation of animal; to gain other abilities and skills of performance of clinical procedures and interpretation of received results, useful for work as veterinary surgeon independently; to recognize surgical patient, to identify the urgency of intervention, to examine patient, to diagnose disease exactly, to assess possible causes, to select appropriate treatment, to offer and apply preventive measures; to assess the animal's pain, control it before and after surgery; to acquire skills of study and independent practical work necessary for the constant professional self-education and the formation of his/her personality.

16. **The fifth year veterinary medicine student successful completion studies of Large Animal Surgery module** shall be able to sterilize surgical tools, to observe requirements of aseptic and antiseptics, to combine anesthetic agents, to combine sedation with local anesthesia,

to sedate and narcotize large animal, to control post-surgical pain; to analyze and summarize information, to organize and perform treatment independently; to use hand tools when providing veterinary first aid; to make decision on the death of large animal; to organize work in surgery room either infield conditions, to work in team and individually; to provide veterinary first aid in extreme conditions, to recognize surgical patient, to identify the urgency of intervention, to examine patient, to diagnose disease exactly, to assess possible causes, to select appropriate treatment, to offer and apply preventive measures; to select appropriate restrain method for animal during the procedure or surgery.

17. **The fifth year veterinary medicine student for successful completion of Animal Obstetrics, Reproductive Disorders and Clinical Rotation subject** shall be able to recognize, analyze and evaluate the main processes taking place in different animal species which have impact on reproductive performance; diagnose, treat and provide prevention of gynecological disorders, to organize and perform safely gynecological examination and obstetrics procedures; rationally and responsibly apply diagnostic techniques and treatment methods of gynecological cases, be able to evaluate the parameters of biological fluids and biochemical indicators, to take and assess cytological samples; to provide first aid at delivery, to perform clinical procedures such as medicine application to the uterus, lavage, rectal examination, ultrasound examination, sexual dominance assessment, will know the procedures of artificial insemination and embryo transfer; to identify, apply appropriate diagnostic methods, evaluate and provide treatment for andrological disorders; to perform stimulation, synchronization and control of the oestrous cycle and to treat reproductive cycle functional disorders; to link housing, care, feeding conditions of animal with its reproductive function and to determine the relationship between metabolic disorders and reproductive function.

## V. ORGANIZATION AND IMPLEMENTATION OF THE CLINICAL ROTATION

18. The Rotation is obligatory for all the third, fourth and fifth-year students of VM programme.

19. The Rotation is formed according to the curriculum of VM programme approved by LSMU Senate.

20. Cumulative evaluation of achievements is used for evaluation of competencies achieved during formation of Rotation.

21. When the student arrives to form Rotation, s/he is registered in the Base registration journals, introduced to the rules of safe work and internal order, and signs in the journal of occupational safety.

22. Instructions of safe work are located at receptions of LAC and KRSGK, at PTTC, VMSC.

23. Formation of Rotation is guided by the Supervisor (mentor), who assigns tasks to the student according to the plan of formation of Rotation of respective course.

24. KRSGK and LAC for the IV and V course the Rotation takes place at night time – from 20:00 to 08:00 according to pre-set schedule and timetable.

25. Students form Rotation at KRSGK and LAC, PTTC, VMSC according to pre-set schedule and timetable; rotations can also take place on Saturdays according pre-set schedule and timetable;

26. Timetable of Rotation formation is published in the LSMUSIS and Moodle and is available for students and staff.

27. Student must not leave place of Rotation formation without permission of Supervisor or administrator of the clinic.

28. Student, who has missed formation of Rotation, should inform Coordinator within 5 working day and arrange another time of Rotation formation.

29. Student, who has missed at least one formation of Rotation must redo it, regardless of the reason of the miss: KRSGK is allowed to form Rotation only during holidays, weekends and in LAC at the time specified by the Coordinator.

30. On arrival to the Base, the student shall be ready for work. Student shall meet requirements of bio-safety and have measures necessary for practical work.

31. Student arrived to **KRSGK** for Rotation should:

- Be prepared for work at 7:45 p.m. in the morning shift and in the afternoon shift at 13:45 p.m.
- Have Student card, several sets of disposable work tools (examination gloves, cap, facial mask, shoe covers);
- Have *personal* phonendoscope, thermometer, diagnostic lamp, clock with second hand, medical scissors; the watch must be attached to the outfit.
- Have *patient registration journal IV and V course (Annex 1)* and *e-Logbook* (on your personal phone, computer, tablet, or other personal devices)
- Be neatly combed (long hair tied), nails only natural, short and round cut, unvarnished, hands free from rings, jewellery minor hand wounds should be bandage and should be handled only with medical gloves (*hereunder on: Regarding the approval of the Lithuanian hygiene Standard HN 47-2020 „Health care institutions. Infection control requirements“*)

32. Student arrived to **VMSC** for Rotation must:

- Have white laboratory coat, Student card;
- Have ability to log to *e-Logbook* on your personal phone, computer, tablet, or other personal device)

33. Student arrived to **LAC** for Rotation must:

- Have comfortable work clothes, boots;
- Have Student card *personal* phonendoscope, clock with second hand, thermometer;
- Have *patient registration journal*, *e-Logbook* (on your personal phone, computer, tablet, or other personal device)
- Leave all personal belongings and mobile devices in the clinic's cloakroom unless otherwise stated, unless they are used to complete an e-Logbook (unless otherwise specified by the supervisor).

34. Student arrived to **PTTC** for clinical rotation must:

- Have comfortable work, clothes;
- Have Student card, *personal* phonendoscope, clock with second hand, thermometer;
- Have *patient registration journal*, *e-Logbook* (on your personal phone, computer, tablet, or other personal device);

35. It is forbidden to use any electronic devices (smart phones, laptops, tablets etc.) during formation of Rotation unless otherwise stated, except when completing e-Logbook.

36. **We recommend** to leave all valuable personal belongings at home, as VA clinics and VMSC are not responsible for the safety of items left in the changing room.

37. During each Rotation, the student must complete e-Logbook noting all acquired competencies (note: *in practica.lsmuni.lt competences is marked as skills*) and the level at which they were performed (A-independently, B-assisted, C-observed) and submitting them to the Supervisor for approval. The Supervisor accepts or rejects (should be marked reason of rejection) the competencies submitted by the student.

The Supervisor who accepts the competencies sent by the student signs and records the date, thus counting the day of the student's clinical rotation.

Before receiving the assessment for the acquired competence (note: in the e-Logbook it is marked as "*Professional values and behaviour*") the student must have completed them (unless otherwise specified by the teacher coordinating the module/subject) at **least twice** A (independently) and / or B (assisted) level.

The Supervisor evaluates the competencies acquired by the student by writing grades in e-Logbook. The e-Logbook can be filled in during laboratory and practical work, if it was so instructed by the coordinating lecturer.

38. It is forbidden to take a photo of patient without permit of its owner or Supervisor!

39. The student, who does not satisfy the requirements of work hygiene and are not prepared for practical work, ignores internal rules and requirements of the clinic are not allowed to form Rotation or attend to practical works in the clinic.

40. If the student disobeys the set rules or leaves the places of Rotation without authorization, he/she will be marked as absent for that day and this day must be completed in accordance with the prescribed procedure.

41. Practical competences acquired by a student are assessed according to the Rotation assessment strategy in accordance with the LSMU Study Regulations.

## VI. FUNCTIONS OF COORDINATOR OF CLINICAL ROTATION

42. Coordinator of the Rotation:

- prepares timetables of Rotation for all third, fourth- and fifth-year students in all units where Rotation is proceeded;
- controls process and timetables of Rotation.

## VII. RIGHTS, POSITION AND RESPONSIBILITIES OF THE STUDENT

43. The student shall observe internal orders, rules of safe work and bio-safety specified in the requirements of Bases during the formation of Rotation.

44. The student shall observe principles of professional ethics of the veterinarian, behave properly with patients and respect their owners.

45. The student shall conduct tasks assigned by the supervisor of Rotation, together with the Supervisor examine, diagnose and treat ill/sick animals.

46. The student's gained Rotation is evaluated according to the LSMU Regulation of the Studies.

47. Students have the right to appeal and complain: Regarding the assessment and assessment procedures, the student has the right to appeal in accordance with the provisions of the LSMU Study Regulations.

48. In cases of harassment, sexual harassment, pursuit or violence, the student may contact the University administration directly or fill in the report form in the Academic Ethics section of the

University website in Lithuanian or English, as specified in the Rules of Prevention of Harassment, Sexual Harassment, Pursuit and Violence of Lithuanian University of Health Sciences. Free psychological assistance is provided to LSMU staff and students who have experienced discrimination, harassment or other degrading events.

49. Students have the right to complain about disputes with the administration and other employees in accordance with the LSMU Student Dispute Resolution Procedure with the administration and other employees.

## VIII. CLINICAL ROTATION IN PROPEDEUTICS

### Year III

50. The Rotation for third-year students is obligatory part of the modules Propedeutics, Radiobiology and Diagnostic Imaging and Propedeutics, Clinical Pathology and Diagnostic Imaging.

51. Rotation of **Propedeutics, Radiobiology and Diagnostic Imaging** is formed in autumn semester: KRS GK - 8 academic hours (4 -in Veterinary Pharmacy and 4 in Laboratory) and VMSC - 4 academic hours and LAC - 4 academic hours, one time at PTTC (total 8 academic hours) **Clinical Pathology and Diagnostic Imaging** is formed in spring semester: KRS GC (in one of the clinic sections) 8 academic hours ; VMSC - 4 academic hours and LAC - 4 academic hours, one time at PTTC - 8 academic hours;

52. The formation of Rotation according to the schedule is mandatory for every student.

53. The student who has missed formation of Rotation must redo it, regardless of the reason of the miss. The student missed at least one formation of Rotation is not allowed to take a final evaluation of Propedeutics, Radiobiology and Diagnostic Imaging and Propedeutics, Clinical Pathology and Diagnostic Imaging.

54. The final assessment of the acquired competencies shall be introduced into the cumulative formula of Propedeutics, Radiobiology and Diagnostic Imaging and Propedeutics, Clinical Pathology and Diagnostic Imaging.

**55. During the Rotation at the KRSGK, the students will achieve the following competences and will be able:**

**55.1. Propedeutics, Radiobiology and Diagnostic Imaging (*in autumn semester in Veterinary Pharmacy and Laboratory*) :**

- To apply required medical treatment and diagnostics documentation completion;
- To apply pharmacy work and documentation peculiarities;
- To apply Veterinary laboratory work and documentation peculiarities;
- To obtain biosafety during clinical work;
- To choosing correct equipment for laboratory testing;
- To mastering laboratory testing techniques.

**55.2. Propedeutics, Clinical Pathology and Diagnostic Imaging (*in spring semester in one of the clinic sections*):**

- To communicate effective;
- To evaluation of patient's nutritional condition;
- To restraining and handling (simulation) animal (dog, cat and/or exotic animal);
- To perform and interpret clinical examination;
- To obtain biosafety during clinical work;
- To evaluate records and results of the tests of hospitalized patient;
- To write a recipe.

**53. During the Rotation at the VMCS, the students will achieve the following competences and will be able:**

**56.1. Propedeutics, Radiobiology and Diagnostic Imaging (*in autumn semester*):**

- To restrain and handling cat;
- To restrain and handling dog;
- To restrain and handling exotic animal;
- To give medicine according to the requirements;
- To select and prepare of intravenous catheter;
- To insert of intravenous catheter;
- To select appropriate needle and syringe, to take right amount of drug into syringe;
- To examine and testing of small animal dermatology patients;
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**56.2 Propedeutics, Clinical Pathology and Diagnostic Imaging (*in spring semester*)**

- To collect anamnesis;
- To prepare of work space;
- To perform ECG for small animals;
- To perform enemas;
- To collect, keep and transport of urinary samples;
- To diagnose imagining tests performance and interpretation of results;
- To take blood samples from the blood vessels of large animals;
- To prepare fluid therapy in a small animal;
- To examine dental of small animals dental;
- To examine and testing of small animals eye;

**54. During the formation of Rotation at the LAC, the students III course will achieve the following competences and will be able:**

**54.2. Propedeutics, Radiobiology and Diagnostic Imaging (*in autumn semester*)**

- To apply required documentation for treatment and diagnostic tests;
- To obtain biosecurity requirements in veterinary clinic;
- To restrain and handling horse;
- To perform determination of displaced abomasum;
- To evaluate of physiological parameters of rumen in ruminants;
- To determinate animal constitution type for cows;

- To determine animal constitution type for horses;
- To measure body temperature of horses;
- To apply medication as required (simulation);
- To prepare and select of intravenous catheters;
- To insert intravenous catheter (simulation);
- To select appropriate needles and syringes, and to draw medicine into the syringe.

#### 54.3. **Propedeutics, Clinical Pathology and Diagnostic Imaging (in spring semester)**

- To communicate effectively;
- To perform clinical trial and interpret the results;
- To obtain biosecurity requirements;
- To care inpatient;
- To collection of anamnesis (possible simulation of the situation when communicating with a teacher / doctor);
- To take animal's urine sample;
- To take a sample of the animal's faeces;
- To interpret blood smears;
- To perform a visual diagnostic test and evaluating the results;
- To perform a laboratory test and interpret the results.

55. **During the Rotation at PTTC of LSMU the III course students will achieve the following competences and will be able:**

#### 58.1 **Propedeutics, Radiobiology and Diagnostic Imaging (in autumn semester)**

- To apply required treatment and diagnostics tests documentation;
- To determine animal constitution type;
- To perform determination of displaced abomasum;
- To evaluate the physiological parameters of rumen in ruminants;
- To obtain biosecurity requirements in PTTC;
- To restraint and handling cow;
- To measure ruminant body temperature
- To select needles and syringes, to draw the medicine into the syringe.

#### 58.2 **Propedeutics, Clinical Pathology and Diagnostic Imaging (in spring semester)**

- To take animal's urine sample;
- To take a sample of the animal's faeces;
- To obtain biosecurity requirements in PTTC;
- To communicate effectively;
- To perform a laboratory test and interpret the results;
- To perform clinical trial and interpret the results;

## **IX. FORMATION OF CLINICAL ROTATION OF SMALL ANIMAL INTERNAL DISEASES Year IV**

56. The Rotation for fourth-year students is obligatory part of module of Small Animal Internal Diseases.

57. The Rotation according to the schedule is mandatory for every student.

58. The student who has missed formation of Rotation must redo it, regardless of the reason of the miss. The student who has missed at least one formation of Rotation is not allowed to take a final evaluation of Small Animal Internal Diseases.

59. The final assessment of the *acquired competencies* and *patient registration journal* shall be introduced into the cumulative formula of Small Animal Internal Diseases. Reflection should be written in the end of Rotation.

60. Rotation of Small Animal Internal Diseases are formed for four days consecutively (total 32 academic hours), 4 times per academic year at the KRSGK. The formation of clinical rotation once is performed during night time (16 academic hours) and once on Saturday (16 academic hours);



**64. During the Rotation at the KRSGK the students will achieve the following competences and will be able:**

- To collect anamnesis from the owner of the diseased animal
- To carry out a targeted clinical examination of the diseased animal and comment on the results obtained
- To develop a diagnostic test plan for the patient
- To take samples for diagnostic tests (patient)
- To interpret the results of diagnostic examinations (laboratory, imaging, etc.) of sick patient
- To make a list of differentiated diseases for a sick patient
- To make a treatment plan for a sick patient
- To perform the procedures required for treatment in the prescribed patient (drug injection: s.c., i.m., i.v., enema, abdominocentesis, thoracocentesis, wound care, etc.).
- To develop a prevention plan for the patient being treated / recovered
- To develop a plan of preventive measures for a healthy patient (vaccination, measures against ecto- and endoparasites)

**X. CLINICAL ROTATION OF LARGE ANIMAL INTERNAL DISEASES Year IV**

65. Rotation for fourth-year students is obligatory part of module of Large Animal Internal Diseases.

66. Rotation according to the schedule is mandatory for every student.

67. Clinical rotation of Large Animal Internal Diseases are formed 8 times per academic year (total 64 academic hours) at the Large Animal clinic. The formation of clinical rotation is performed during night time (16 academic hours).

68. The student who has missed formation of Rotation must redo it, regardless of the reason of miss. The student who has missed at least one formation of clinical rotation is not allowed to take the final evaluation of Large Animal Internal Diseases.

69. The final assessment of the *acquired competencies* and the patient registration journal shall be introduced into the cumulative formula of Large Animal Internal Diseases. Reflection should be written in the end of Rotation.

**70. During the Rotation at the LAC, PTTC and laboratory works, the students will achieve the following competences and will be able:**

- To register a patient;
- To collect anamnesis;
- To perform clinical examination of an animal;
- To fill up protocol of clinical examination;
- To choose laboratory and diagnostic tests for diagnosis of disease;
- To take blood samples of different animal species.
- To mark the samples of blood taken, transport them and fill enclosed documents;
- To take samples for bacteriological tests.
- To mark the samples of blood taken, transport them and fill enclosed documents;
- To perform a blood morphological test and to evaluate obtained results.
- To perform test of blood smear and evaluate received results of the leucoformula;
- To perform a blood biochemical test and evaluate obtained results;
- To prepare for instrumental examination: X-ray, endoscopic and ultrasound examinations.
- To acquire equipment operational principles and research methods;
- To interpret results of the performed X-ray and ultrasound examinations;
- To determine the preliminary diagnosis, to analyze received research results and to examine possible causes of disease;
- To establish a treatment plan;
- To calculate doses of drugs individually for each animal according to the body's weight;
- To follow the course of the treatment: to determine the clinical condition;
- To fill up the history of the disease;
- To make a prevention plan of diagnosed disease and give recommendations;

- To take and investigate samples of skin's scrapes in relation to ectoparasites and mycoses;
- To evaluate the balance of the diet of patients with various diseases and treatments;
- To acquire the correct delivery of motion to various patients;
- To introduce the probe to cattle;
- To introduce the magnetic probe to cattle;
- To introduce the probe to horse;
- To introduce the technique of enema in different animal species;
- To determinate displaced abomasum;
- To introduce technique of rectal palpation in different animal species and interstate structures.

## **XI. CLINICAL ROTATION OF SMALL ANIMAL GENERAL SURGERY AND ANESTHESIOLOGY**

### **Year IV**

71. The Rotation for fourth-year students is obligatory part of module of Small Animal General Surgery and Anesthesiology.

72. The formation of Rotation according to the schedule is mandatory for every student.

73. The student who has missed formation of Rotation must redo it, regardless of the reason for the miss. Also, the student who was not evaluated for at least one competence has to get evaluation otherwise the student will get debt from Small Animal General Surgery and Anesthesiology subject.

74. The final assessment of the Rotations consists of: evaluation of competencies (4 competencies), evaluation of reflection (the grade is added to competencies grades). The formula is in the subject description. The final assessment will be added into the cumulative formula of Small Animal General Surgery and Anesthesiology.

75. During the year, Rotation of Small Animal Surgery is formed: one time in KRSGK (total 8 academic hours);

76. Before receiving the evaluation for the compulsory competency, the student must register at VMSC during independent hours and perform the competencies there twice independently (A) and/or assisted (B).

**77. During the clinical rotation in KRSGK, the IV course students will achieve the following competences and will be able:**

- to fill in anaesthetic protocol;
- to calculate the drug dose of anesthetic;
- to connect the vital signs monitoring device to the patient;
- to analyse data from the patient's vital signs monitoring device.

## **XII. CLINICAL ROTATION OF LARGE ANIMAL GENERAL SURGERY AND ANESTHESIOLOGY**

### **Year IV**

78. The rotation for fourth-year students is a mandatory component of the Large Animal General Surgery and Anesthesiology program.

79. It is imperative for every student to adhere to the prescribed plan for the organization of rotations.

80. The student who has failed to attend the formation of Rotation is required to repeat it, irrespective of the cause for their absence. Furthermore, it is imperative that any student who has not been assessed for at least one competency must undergo evaluation. Failure to do so will result in the student incurring debt in the Large Animal General Surgery and Anesthesiology course.

81. The culminating evaluation of the Rotations entails two components: an assessment of competencies, which encompasses four distinct areas of proficiency, and an evaluation of reflection, wherein the resulting grade is incorporated into the overall grading of the competencies. The formula can be found in the description of the subject. The ultimate evaluation will be incorporated into the cumulative formula of Large Animal General Surgery and Anesthesiology.

82. Throughout the year, a rotation in Large Animal Surgery is organized, which takes place once at Large Animal Clinic and consists of a total of 8 academic hours.

83. Before receiving the evaluation for the compulsory competency, the student must register at VMSC during independent hours and perform the competencies there twice independently (A) and/or assisted (B).

84. During the clinical rotation in the Large Animal Clinic, **the IV course students will achieve the following competences and will be able:**

- to complete the anesthetic protocol;
- to determine the appropriate dosage of an anesthetic medication;
- to master the parts of the endotracheal tube, the course of introduction;
- to evaluate clinical examination parameters

### **XIII. CLINICAL ROTATION OF SMALL ANIMAL SURGERY**

#### **Year V**

85. The Rotation for fifth-year students is obligatory part of module of Small Animal Surgery.

86. The formation of Rotation according to the schedule is mandatory for every student.

87. The student who has missed formation of Rotation must redo it, regardless of the reason for the miss. Also, the student who was not evaluated for at least one competence has to get evaluation otherwise the student will get debt from Small Animal Surgery subject.

88. The final assessment of the Rotations consists of: evaluation of competencies (20 competencies), evaluation of reflection (the grade is added to competencies grades) and evaluation of patient registration journal (30 patients mandatory). The formula is in the subject description. The final assessment will be added into the cumulative formula of Small Animal Surgery.

89. Patients described in the patient registration journal must be seen by the student during Rotation and during lab. works.

90. During the year, Rotation of Small Animal Surgery is formed: one time at VMSC (total 8 academic hours), 4 times (8 academic hours per time) during day time in KRSGK per academic year (total 32 academic hours), and once during the night time (16 academic hours) in KRSGK.

91. First 10 competencies grades have to be gathered during Rotations in VMSC during autumn semester. Other competencies grades have to be gathered during Rotations in KRSGK. **Competencies grades will have to be gathered during clinical rotations in VMSC.**

92. **During the clinical rotation at the Center of Veterinary Medicine Simulation, the V course students will achieve the following competences and will be able:**

- To communicate effectively
- To prepare Surgeon's for surgery;
- To apply properly bandage techniques;
- To recognise and proper to use of surgical instruments;
- To complete required medical treatment and diagnostics documentation;
- To identify and select needles and suture material for suturing various tissues;
- To give detailed information to the owner about post-operative care of the animal
- To choose the right dressing material according to needs;
- To type and specify the infringement;
- To evaluate, analyse and discuss on disease records of hospitalized patient;
- To assess the risk of anaesthesia;

**93. During the clinical rotation at the KRSGK, the students will achieve the following competencies will be able to:**

- To prepare an operating room;
- To take care of the animal after anaesthesia;
- To know all work materials that are used during the surgery;
- To prepare for anesthesia;
- To provide the first aid for the animal;
- To assess pain using pain scales;
- To position animal for X-ray of the thorax, abdomen, front and hind legs, pelvis and interpretation of the radiographs;
- To prepare of the patient for anaesthesia;
- To monitor animal during anaesthesia;
- To fill in anesthesia protocol.

#### **XIV. FORMATION OF CLINICAL ROTATION OF LARGE ANIMAL SURGERY Year V**

94. The formation of Rotation for fifth-year students is obligatory part of module of Large Animal Surgery.

95. The formation of Rotation according to the schedule is mandatory for every student.

96. Rotation of Large Animal Surgery are formed 4 times per academic year (total 32 academic hours) at the LAC. The formation of clinical rotation is performed during nighttime (16 academic hours).-On time per academic year in Pig farm - 8 academic hours.

97. The student who has missed formation of Rotation must redo it, regardless of the reason of the miss. The student who has missed at least one formation of clinical rotation and who fails to pass for all the competencies required to acquire the student loses the opportunity to take the final examination of the Large Animal Surgery module.

98. The final assessment of the *acquired competencies* and *patient registration journal* shall be introduced into the cumulative formula of Large Animal Surgery Module. Reflection should be written in the end of Rotation

99. The final assessment of the acquired competencies shall be entered in the formula of the Large Animal Surgery Module. The assessment of the practical competencies of the Rotation of Large Animal Surgery will be carried out at the end of the spring semester within one week according to the calendar-thematic plan of the subject during the practical works.

**100. During the Rotation at the LAC, the students will achieve the following competences and will be able:**

- To be able to prepare a large animal for narcosis and surgery and to master their course;
- To be able to evaluate clinical status of the patient under narcosis, and to fill in required documents for monitoring of operation;
- To know the purpose of tools used in large animal surgery;
- To be able to prepare instruments for surgery sterilization of tools (boiling, autoclaving, aseptic processing with chemical solutions, etc.);
- To be able to manage instruments after surgery;
- To be able to select suturing material, to know principles of suturing material marking, to select correct material for different cases in large animal;
- To assist during different operations: to form skills of assistantship;
- To examine oral cavity of the animal and to investigate dental health status of horse, cattle and to perform required procedures;
- To perform an ophthalmic examination of the large animal and to make the diagnosis;
- To perform orthopedic examination of lame horse, to collect anamnesis, to interpret test's results, to determine degree and form of lameness, location of pathology points, to determine origin of the lameness, to formulate the diagnosis, to perform treatment procedures.
- To be able to assess the regularity and health of hooves;
- To perform orthopedic examination of a limping ruminant (cattle, sheep, goats, etc.), assess the health of the claws, be able to analyze diagnostic images of the claws;

- To give emergency veterinary care to a surgical patient;

## **XV. ANIMAL OBSTETRICS, REPRODUCTIVE DISORDERS AND CLINICAL ROTATION**

### **Year V**

101. The subject of Animal Obstetrics, Reproductive Disorders and Clinical Rotation consists of modules of Large Animal Obstetrics and Reproductive Disorders, Large Animal Andrology and Small Animal Obstetrics and Reproductive Disorders.

102. Rotation is integrated into the thematic work plan in each module separately and is obligatory for all students.

103. A student who has missed the work of Rotation must re-work or do tasks for missed class, regardless of the reason.

104. A student is assessed negatively if s/he has not re-worked missed Rotation work.

105. Competencies, reflection and patient registration journal must be assessed positively in order to be included in the cumulative score formula.

106. The overall assessment of acquired competencies, reflections and patient registration journal are recorded as a practice report in each semester separately in the Large Animal Obstetrics and Reproductive Disorders and in the Large Animal Andrology modules.

107. The overall assessment of acquired competencies and patient registration journal are recorded as a practice report in the Small Animal Obstetrics and Reproductive Disorders module.

**108. During the Animal Obstetrics, Reproductive Disorders and Clinical Rotation, the students will achieve the following competences and will be able:**

- To evaluate external reproductive system organs in cat and dog (female);
- To evaluate reproductive system radiograph images of female dog (pyometra/hydrometra/mucometra, pregnancy);
- To evaluate reproductive system ultrasonography images of female dog (pyometra/hydrometra/mucometra, pregnancy, ovaries cysts);
- To evaluate external genitalia of cat and dog (male);
- To evaluate dog's prostate in ultrasonography images;
- To evaluate reproductive system radiograph of male dog and male cat;
- To select, prepare and appropriate use of obstetric, gynecological, andrological instruments and tools;
- To evaluate the animal's genital organs by using animal by-products;
- To perform a gynecological examination in relation to oestrus and identify the signs of oestrus;
- To assess the female reproductive status based on vagina and cervix characteristics;
- To perform an assessment of the reproductive status according to the anamnesis, clinical condition and special examination;
- To compile the gynecological treatment plan: in cases of uterine infection, anoestrus, oestrous cycle stimulation (synchronization);
- To determine pregnancy;
- To diagnose disorders of the mammary gland, make a treatment plan and provide prevention;
- To examine and evaluate fresh and frozen male's semen;
- To perform the artificial insemination procedure (simulation).

## **XVI. FINAL PROVISIONS**

109. A supplement of the procedure entry into force since 1<sup>st</sup> January 2025

110. The procedure may be amended, supplemented or cancelled by the decision of the Council of the Faculty of Veterinary Medicine.

## PATIENT REGISTRATION JOURNAL

**Student Name, Surname, Group**

<b>No. 1</b>	
<b>Date</b> <i>Month, day, year</i>	
<b>Type of animal</b> Species, breed, gender, age/date of birth, body weight.	
<b>The details of the case</b> Detailed anamnesis: clinical symptoms, information provided by the owner.	
<b>T<sup>0</sup>, P, RR.</b> <b>Symptoms</b> Every day clinical examination results written here, symptoms most typical for diagnosis (heart rate, respiratory rate, CRT mucous membranes color, urination, defecation, abdominal palpation).	
<b>Blood, urine, puncture, cytology and others test results (if performed)</b> Indicate the results obtained by highlighting the changes of the results	
<b>Examinations</b> X- ray (indicate projections and visible changes) Ultrasound examination (indicate area and visible changes) MRI or CT (indicate area and visible changes) and so on	
<b>Diagnosis</b> The exact diagnosis If changes every day – note the date and new diagnosis. (Castration or OHE is not a diagnosis).	
<b>Treatment and prevention</b> Full description of used materials and procedures in treatment, performed surgical and diagnostic procedures with a brief methodical description.	
<b>Prognosis and/or outcome of the disease</b> Example Recovered	
<b>Notes</b>	

<p><i>Written remarks, comments, personal opinion of the student about the covered case, otherwise, why (e.g.: what other or additional procedures, tests would you recommend, perhaps you think that the diagnosis may be different or even concurrent. The student must express his comments as well regarding the treatment. If necessary, provide recommendations regarding care, feeding, special diets etc.).</i></p>	
<p>The signature of veterinarian</p>	
<p><b>No 2.</b></p>	
<p><b>Date</b> <i>Month, day, year</i></p>	
<p><b>Type of animal</b> Species, breed, gender, age/date of birth, body weight.</p>	
<p><b>The details of the case</b> Detailed anamnesis: clinical symptoms, information provided by the owner.</p>	

**Confirmation**

By this I ..... certify that all information provided in the journal is correct, and are written by my own.

Student's signature ..... Date .....

## **INSTRUCTION HOW TO FILL IN PATIENT REGISTRATION JOURNAL**

**Each student of IV and V course every year must fill a personal PATIENT REGISTRATION JOURNAL IN A SEPARATE BINDER. Data about seen patients during clinical rotation (*during laboratory works, clinical rotation, practice work, when working in the clinic departments, farm, volunteering in animal clinics' of LSMU FVM, etc.*) supervised by the LSMU's veterinary doctor or lecturer should be filled in the journal. Data about patients seen during additional practice can't be included in the journal.**

The Patient Registration Journal should be uploaded *in PDF format* (title of the documents *N. Surname gr.*) in Moodle platform in course specified by the clinical rotation supervisor and coordinator;

The Patient Registration Journal should be uploaded at the time specified by the module coordinating lecturer;

At the end of the academic year, the Patient Registration Journal is evaluated with a grade (from 1-10 according to the procedure provided by the LSMU Study Regulations) which is introduced in cumulative formula of the subject.

It is forbidden to use the *patient registration system in clinics* by completely copying it in Patient Registration Journal and submitting in it as your personal data. In the Patient Registration Journal, all cases presented **must be described individually for each student**. Clinical cases may be repeated, but must be described and submitted individually for each student.

*The minimal number of described patients (according to ESEVT SOP indicator recommendations)*

Course	Companion animal (dogs, cats)	Rabbit, rodent, bird, exotic animals	Equine	Ruminants and pigs	Poultry and farmed rabbits
IV <i>Internal medicine</i>	15	2	8	20	1
V <i>Surgery</i>	30	3	1		
V <i>Obstetrics, Reproductive Disorders</i>	-	-	5	10	-