REGULATIONS

on the Simulation Center and Preclinical Training
(including early clinical training
under the "General Medicine" educational program)

1. General Provisions

1.1. These Regulations define the goals, objectives, and organization of the work of the JAIU Simulation Center (hereinafter referred to as the Simulation Center, SC) and the procedure for preclinical training of students, including elements of early clinical training under the “General Medicine” educational program (hereinafter referred to as the GM program).

1.2. The Simulation Center is a structural unit of the University/Faculty of Medicine (specified in the organizational chart) and is part of the JAIU internal quality assurance system for education.

1.3. Preclinical training is conducted:

1. at the Simulation Center—using manikins, training devices, high-tech simulators, and with the participation of standardized patients;
2. as part of early clinical training—at the clinical sites of partner healthcare facilities under the guidance of clinical mentors.

1.4. The Simulation Center and preclinical training operate in accordance with:

1. the legislation of the Kyrgyz Republic in the fields of education and healthcare;
2. state educational standards for the “General Medicine” educational program;
3. the Charter of JAIU;
4. the Regulations on the Quality Management System of JAIU;
5. the Regulations on the Organization of the Educational Process Using the Credit System;
6. Regulations on Work-Based Learning (WBL);
7. Regulations on Internships;
8. Regulations on Innovative Educational Technologies for the LD Program;
9. Agreements with medical and preventive care institutions;
10. these Regulations.

1.5. These Regulations apply to all students in the OP LD program (Russian- and English-language tracks) and to instructors/mentors involved in preclinical and early clinical training.

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2. Terms and Definitions

2.1. **Simulation-based training** – an organized educational process using mannequins, phantoms, simulators, simulation programs, virtual reality, and standardized patients to practice practical and communication skills without risk to real patients.

2.2. **Preclinical training**—a stage of education aimed at developing students’ basic clinical and practical skills in a safe environment (SE) before they begin working with real patients.

2.3. **Early clinical training**—students’ participation in clinical activities under the supervision of a mentor at healthcare facilities (examinations, communication with patients, case discussions, etc.) in parallel with preclinical and theoretical training.

2.4. **OSCE/OSPE station** – a structured station for the Objective Structured Clinical/Practical Examination, equipped with the necessary equipment and checklists for standardized assessment.

2.5. **Standardized Patient (SP)** – a specially trained individual who simulates a clinical situation to help students practice communication and clinical-diagnostic skills.

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3. Goals and Objectives of the Simulation Center and Preclinical Training

3.1. Goal – to ensure the safe, step-by-step, and standardized development of clinical and practical competencies among students in the LD educational program using modern simulation technologies and integration into clinical practice.

3.2. Objectives:

3.2.1. Development of basic clinical skills (examination, communication skills, medical history taking, physical examination).
3.2.2. Mastering procedural skills (manipulations, injections, dressings, basic resuscitation, working with equipment, etc.).
3.2.3. Practicing emergency care protocols and actions in critical conditions.
3.2.4. Preparing students for early clinical work with real patients.
3.2.5. Preparation and administration of OSCE/OSPE and other forms of objective assessment of practical skills.
3.2.6. Fostering a culture of interprofessional collaboration, teamwork, professional ethics, and patient safety.

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4. Structure and Management of the Simulation Center

4.1. The Simulation Center may include:

1. rooms for basic procedural skills (injections, catheterization, dressings, etc.);
2. a resuscitation and emergency care room (BLS/ACLS, trauma, etc.);
3. a general clinical skills station (communication, history-taking, physical examination);
4. a standardized patient room;
5. a room for OSCE/OSPE (multiple stations);
6. training classroom/debriefing room;
7. technical and storage rooms.

4.2. The Simulation Center is managed by the head/director of the SC, appointed by order of the rector upon the recommendation of the dean/vice rector.

4.3. The Head of the SC reports to the Dean of the Faculty of Medicine / Vice Rector for Academic Affairs (to be specified) and is responsible for:

1. organizing the educational process at the SC;
2. the rational use and preservation of equipment;
3. compliance with safety and infection control requirements;
4. maintaining documentation and reporting.

4.4. The Training Center staff includes:

1. instructors (by subject and skill);
2. lab assistants/technical specialists;

1. if available, a standardized patient coordinator.

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5. Organization of preclinical and early clinical training

5.1. Preclinical and early clinical training is planned:

1. at the level of the LD educational program – in the curriculum and program description;
2. at the course level – in course outlines and syllabi (sections “Practical Skills,” “Workplace Training,” “OSCE/OSPE”);
3. at the student level – through skills logbooks and WBL (in accordance with the Regulations on Workplace Learning).

5.2. Training is organized according to the following principle:

1. **First – simulation (SC):**
   – the student practices the skill on a mannequin/phantom/simulator using a checklist;
2. **Then – early clinical practice (healthcare facility):**
   – under the supervision of a mentor, the student performs/applies the skill on a real patient (provided the patient has an acceptable level of consent).

5.3. Groups for work in the SC are formed taking into account:

1. level of training;
2. language stream (Russian/English);
3. station and equipment capacity limits.

5.4. **A scenario** and **checklist** are developed for each session in the SC, including:

1. learning objectives and competencies;
2. a list of necessary procedures and steps;
3. success criteria;
4. safety rules.

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6. The Training Process at the Simulation Center

6.1. Main types of sessions:

1. skill demonstration by the instructor;
2. students practicing the skill according to a protocol;
3. simulation scenarios (case-based, team-based);
4. OSCE/OSPE stations (training and examination);
5. debriefing (discussion of errors and areas for improvement).

6.2. Teaching methods:

1. hands-on practice at simulators;
2. scenario-based simulation of emergency conditions;

3. role-playing scenarios with standardized patients;
4. use of video recording and review.

6.3. Lesson timeline (recommended):

1. introductory briefing (objectives, safety, procedure);
2. demonstration and/or independent practice;
3. skill assessment using checklists;
4. debriefing and recording results in the logbook.

6.4. Instructors are required to:

1. complete training on operating the SC equipment;
2. use approved scenarios and checklists;
3. ensure discipline, safety, and appropriate feedback.

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7. Assessment of Practical Skills (OSCE/OSPE and Ongoing Monitoring)

7.1. The assessment of skills in the SC is part of the system for evaluating students' knowledge and skills and is governed by the Regulations on the Knowledge Assessment System and the Regulations on the Assessment Tools Fund.

7.2. Forms of assessment:

1. ongoing assessment during skill practice (based on checklists);
2. practical skills tests (skills lab check);
3. OSCE/OSPE by modules and blocks;
4. elements of Mini-CEX and DOPS (when linked to real/simulated patients).

7.3. The following are developed for each OSCE/OSPE station:

1. a station profile (Appendix 4);
2. a checklist with clear criteria;
3. instructions for the student and examiner;
4. an assessment scheme (scores, passing threshold).

7.4. Assessment results at the Assessment Center:

1. are recorded in the logs (including in the eBilim LMS);
2. recorded in the student's logbooks;
3. may be a prerequisite for admission to clinical courses and practicums (a blocking factor for specific skills).

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8. Safety, Infection Control, and Ethics

8.1. The following are strictly observed in the Simulation Center:

1. safety rules when working with equipment and electrical devices;

2. infection control requirements (gloves, masks, disposal of consumables—when working with biomaterials/simulating procedures);
3. requirements for the storage of medical devices and instruments.

8.2. Students are required to:

1. complete an introductory orientation;
2. follow the instructions of the instructor and SC staff;
3. treat equipment and consumables with care;
4. not use mobile phones or other devices without permission.

8.3. When working with simulated patients:

1. adhere to confidentiality and professional ethics standards;
2. permissible actions (examination, contact, questions) are agreed upon in advance;
3. Informed consent and an agreement with the simulated patient are obtained (at the institutional level).

8.4. All incidents (injuries, equipment damage, serious disciplinary violations) are recorded and investigated at the level of the Training Center and faculty administration.

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9. Documentation and Record-Keeping

9.1. The Simulation Center maintains:

1. a class schedule;
2. logs of completed classes (Appendix 2);
3. equipment acceptance/transfer and write-off reports;
4. safety training logs;
5. OSCE/OSPE protocols;
6. reports on the training center’s workload for the semester/year.

9.2. Students maintain:

1. Individual skills logbooks (may be part of a general WBL logbook);
2. OSCE/OSPE completion forms (signature confirming review of results).

9.3. SC documentation may be maintained in both paper and electronic formats (including in the eBilim LMS), in accordance with the JAIU QMS.

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10. Quality Monitoring and Development of the Simulation Center

10.1. Quality monitoring of the SC’s operations is carried out by:

1. the Internal Monitoring and Quality Department;
2. the Dean’s Office and heads of educational programs;
3. the Faculty Quality Council and Methodology Council.

10.2. Monitoring tools:

1. surveys of students and faculty regarding the quality of classes at the SC;
2. analysis of OSCE/OSPE results and trends in skill acquisition;
3. analysis of the SC's workload and equipment usage;
4. external audit (accreditation visits, expert evaluations).

10.3. Based on the monitoring results, the following are developed:

1. development plans for the SC (equipment upgrades, expansion of scenarios);
2. training programs for teachers and instructors;
3. revisions to curricula and syllabi.

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11. Funding and logistical support

11.1. The activities of the Training Center are funded by:

1. funds from the Founder and the University budget;
2. targeted programs, grants, and projects for the development of simulation-based training;
3. other sources not prohibited by law.

11.2. Logistical support includes:

1. the purchase and maintenance of training equipment, manikins, simulators, and consumables;
2. provision of video recording and playback (for debriefing);
3. updating simulator software.

11.3. The SC participates in preparing requests for equipment and consumables in collaboration with the Dean's Office and the Quality Department (including as part of accreditation roadmaps).

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12. Final Provisions

12.1. These Regulations are approved by the Rector of JAIUand enter into force upon signing.

12.2. Amendments and additions to these Regulations are made at the initiative of the Rector, Vice Rectors, Dean, Head of the SC, and the Quality Council, and are approved by order of the Rector.

12.3. These Regulations may be drafted in Russian, Kyrgyz, and English; in the event of any discrepancy in interpretation, the version specified in the Charter of JAIU shall prevail.

Appendix 1.

Standard Structure of a Class in the Simulation Center

Brief template:

1. Class Topic.
2. Objectives (knowledge, skills, attitudes).
3. Equipment and supplies.
4. Initial clinical situation/scenario.
5. Step-by-step algorithm for student actions.
6. Assessment checklist.
7. Success criteria.
8. Debriefing plan (questions for discussion).

Appendix 2.

Class registration log for the simulation center

Date	Time	Subject/Module	Class Topic / Scenario	Course, Group, Language of Instruction	Instructor	Number of students	Class type (practice, OSCE, etc.)	Note

Appendix 3.

Standard skill practice checklist

(example – “Intramuscular injection”)

No.	Step	Performed correctly (1/0)	Comment
1	Introduced myself to the patient, verified their full name		
2	Explained the procedure, obtained consent		
3	Disinfected my hands, prepared the equipment		
4	Determined the injection site anatomically correctly		
5	Disinfected the skin according to protocol		
6	Inserted the needle at the correct angle and slowly administered the medication		
7	Removed the needle, cleaned the injection site, and disposed of the waste		
8	Monitored the patient and informed them of possible reactions		

Total points: ___ / maximum ___.
Minimum passing score: ___ points.

Appendix 4.

OSCE Station Profile

1. Station name: _____
2. Purpose of the station (which skill/competency is being assessed).
3. Course level / module: _____
4. Time per station: _____ minutes.
5. Equipment and materials: _____
6. Instructions for the student (brief text, handed out before entering).
7. Instructions for the examiner (what to observe, how to fill out the checklist).
8. Checklist (attached).
9. Grading system:
    1. total maximum points;
    2. passing score;
    3. weight of the station in the overall OSCE score.
10. Additional notes (use of SPs, video, language of the exam).

Appendix 1

Strictly in accordance with the LD OP

Typical structure of a session at the simulation center

Appendix 1
to the Regulations on the Simulation Center and Preclinical Training at JAIU

STANDARD CLASS STRUCTURE
at the JAIU Simulation Center

1. **General Information**

1. Course / Module: _____
2. Class Topic: _____
3. Course / Semester: _____
4. Program: “General Medicine” (language of instruction: □ Russian □ English)
5. Instructor: _____
6. Number of students in the group: _____

1. **Class Objectives**

2.1. Learning objectives (knowledge):
– _____
– _____

2.2. Skill objectives (competencies, psychomotor skills):
– _____
– _____

2.3. Goals for developing professional qualities and attitudes (communication, ethics, teamwork):
– _____

1. **Equipment and supplies**

1. Mannequins / phantoms / simulators: _____
2. Medical instruments and devices: _____
3. Supplies (syringes, bandages, etc.):

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4. Additional equipment (monitors, defibrillators, video recording systems):

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1. **Initial clinical situation / scenario**

4.1. Brief case description (for the instructor):

4.2. Initial data visible to the student (medical history, complaints, patient condition):

4.3. Expected student actions (algorithm):

1. _____
2. _____
3. _____

1. **Step-by-step lesson plan**

5.1. Introduction (5–10 minutes):

1. greeting, attendance check;
2. outlining the lesson objectives;
3. reminder of safety rules and work procedures in the SC;
4. brief introduction to the scenario.

5.2. Demonstration / review of the procedure (10–15 minutes):

1. demonstration of the skill by the instructor or a video example;
2. answering students' questions.

5.3. Practical exercise (main part of the session):

1. assignment of roles (students / assistants / observers);
2. independent practice of the skill following the algorithm;
3. individual or team work.

5.4. Assessment and feedback:

1. completion of checklists by the instructor / teaching assistants;
2. brief individual verbal feedback;
3. recording results in a logbook (if applicable).

5.5. Debriefing (10–15 minutes):

1. discussion of major errors and successful solutions;
2. analysis of clinical reasoning and teamwork;
3. answering students' questions.

1. **Criteria for a successful session**

1. minimum set of actions the student must perform;
2. minimum number of points on the checklist: _____ / _____;
3. Requirements for passing:
   – participation in all stages;
   – achieving the threshold level on key checklist items.

1. **Documentation**

1. The SC logbook must be completed (Appendix 2);
2. if necessary – a log sheet, logbook, or session report.

Instructor: _____ /signature/
Date: **"___"_____20**

Appendix 2

Class Registration Log for the Simulation Center

Appendix 2
to the Regulations on the Simulation Center and Preclinical Training at JAIU

LOG
of Class Attendance at the JAIU Simulation Center

No.	Date	Time (from/to)	Subject / Module	Class Topic / Scenario	Course	Group	Language (Russian/English)	Instructor (Full Name)	Number of students	Class type *	Confirmation of completion (signature)
1											
2											
…											

* Class type:
1 – skill practice;
2 – simulation scenario;
3 – OSCE/OSPE practice;
4 – OSCE/OSPE exam;
5 – other (specify in the notes).

The journal cover must include:

1. the name of the log;
2. period of publication (academic year);
3. department (JAIUSimulation Center).

Person responsible for maintaining the log: _____ /Full Name, Signature/

Appendix 3

Standard Checklist for Practical Skill Assessment

Appendix 3
to the Regulations on the Simulation Center and Preclinical Training at JAIU

Template. Specific skills (injection, dressing, catheterization, CPR, etc.) are to be filled in by the department.

CHECKLIST
for practical skill assessment

Skill: _____
Subject / Module: _____

Year: ____ Class: ____ Program: “General Medicine”
Student: _____

No.	Stage of skill performance	Grade*	Instructor’s Comments
1	Preparation: checked the assignment and necessary documents		
2	Greeted the patient/manikin, introduced myself		
3	Explained the procedure and obtained consent		
4	Ensured confidentiality and privacy		
5	Hand hygiene, use of PPE		
6	Prepared equipment and materials		
7	Correctly identified the anatomical site/area of manipulation		
8	Performed the procedure according to the standard algorithm		
9	Followed aseptic and antiseptic procedures		
10	Disposed of consumables according to regulations		
11	Monitored/assessed the patient’s condition		
12	Documented the procedure (entry in the chart/record)		
13	Communication and professional conduct		

* The assessment can be:
– binary (1 – met, 0 – not met);
– or on a 0–2 / 0–3 scale (optional – the department selects and records it in the FOS).

FINAL GRADE

1. Total points: _____ out of a maximum of _____
2. Minimum passing score: _____

Decision:
☐ Skill passed
☐ Needs to be retaken

Instructor: _____ /Full Name, Signature/
Date: **“___”_____20**

Appendix 4

OSCE Station Passport

Appendix 4
to the Regulations on the Simulation Center and Preclinical Training at JAIU

OSCE / OSPE STATION PROFILE

1. **General Information**

1. Station Name: _____
2. Station code (if available): ***OSCE--***
3. Subject / Module: _____
4. Program: “Clinical Medicine,” Year ____, Semester ____

5. Language of instruction: □ Russian □ English

1. **Purpose of the station**

2.1. Which competency/skill is being assessed:

2.2. Level (Bloom / Miller – know/show/demonstrate/do – if desired):

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1. **Time and resources**

1. Time to complete the task: _____ minutes
2. Time to move to the next station: _____ minutes
3. Maximum number of students at the station at one time: ____

1. **Equipment and materials**

1. Mannequins / phantoms / simulators: _____
2. Medical instruments and supplies: _____
3. Documentation (patient chart, test results, etc.): ___
4. Additional: _____

1. **Instructions for the student**
(brief text, distributed before entering the station)

You are a student in the ___ year. You must _____

You have _____ minutes. Please notify the examiner when you are finished.

1. **Instructions for the Examiner**

1. familiarize yourself with the checklist and grading criteria;
2. Do not give the student any hints, except for permitted clarifications;
3. record the completion of each item on the checklist;
4. At the end, assign a total score and note any critical errors.

1. **Station Checklist**

(included as a separate table; the structure is similar to Appendix 3, but adapted for the specific station)

No. Action / Skill Element Score (0/1/2) Critical point (yes/no)
1
2
…

1. **Grading System**

1. Maximum points: _____
2. Threshold (minimum to pass the station): _____

3. Critical points (failure to meet these criteria results in the station being considered failed, regardless of the total score):
– No. _____; No. _____

1. **Station's place in the OSCE structure**

1. OSCE module: _____
2. Number of stations in the module: _____
3. Weight of this station in the overall OSCE score: _____ %

1. **Approval of the station profile**

Station developer (department): _____ /Full name, signature/
Department Chair: _____ /Full Name, Signature/
Approved (Simulation Center): _____ /Full Name, Signature/
Approved by the Methodological Council/Quality Council (Minutes No. ___ dated "___"_____20)

1. Title page of the normal anatomy section of the logbook

SECTION OF THE WORKBOOK
“PRACTICAL SKILLS LOG BOOK
FOR THE COURSE ‘NORMAL ANATOMY’”

Student’s Full Name: _____
Group: _____ Year: _____ Semester: _____
Major: “General Medicine” (language of instruction: □ Russian □ English)

Instructor (group supervisor): _____

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2. Basic skills: anatomical terminology and orientation

Table 1. Mastery of basic anatomical terminology

No.	Skill / Competency	Format (lecture hall, computer lab, 3D platform)	Date	Level*	Instructor’s signature
1	Explain the anatomical planes and axes of the body			1 2 3	
2	Describe the anatomical position of the human body			1 2 3	
3	Use the terms: medial, lateral, proximal, distal, cranial, caudal			1 2 3	
4	Demonstrate the main directions of movement in the joints using a model/3D model			1 2 3	
5	Correctly read and write anatomical terminology (Latin → Russian / English)			1 2 3	

* Level: 1 – has seen/understands the theory; 2 – performs with prompts; 3 – performs independently and confidently.

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3. Skeletal System and Joints

Table 2. Skills for working with bones and joints

No.	Skill	Material (bone, skeleton, model, 3D)	Semester Date	Level (1–3)	Instructor’s signature
1	Identify the main parts of the skeleton (skull, spine, rib cage, limbs)	The entire skeleton	1		
2	Distinguish between types of bones (long, short, flat, mixed)	Real bones / models	1		
3	Identify anatomical landmarks of the vertebrae (cervical, thoracic,	Bones / 3D	1		

No.	Skill	Material (bone, skeleton, model, 3D)	Semester Date	Level (1–3)	Instructor's signature
	lumbar)				
4	Name and show the bones of the skull (vault, base, facial skull)	Skull	1		
5	Identify and describe the humerus, radius, and ulna	Bones	1		
6	Identify and describe the pelvic bone, femur, tibia, and fibula	Bones	1		
7	Identify the major joints and their types (e.g., shoulder, elbow, hip, knee)	Skeleton/model	1–2		
8	Explain the axes and range of motion in major joints	Skeleton/3D	1–2		

4. Myology and internal organs

Table 3. Muscles and Fascia

No.	Skill	Material (model, specimen, 3D)	Semester Date Level	Instructor's signature
1	Identify the major muscle groups of the upper limb	Models / 3D	2	
2	Show the muscles of the lower limb	Models / 3D	2	
3	Show the muscles of the back and their layers	Specimen / 3D	2	
4	Show the muscles of the anterior abdominal wall	Model / 3D	2	
5	Show the muscles of the head and neck (major groups)	Model / 3D	2	

Table 4. Internal organs (splanchnology)

No.	Skill	Material (organ set, model, 3D)	Semester Date Level	Instructor's signature
1	Show the organs of the chest (heart, lungs, pleura)	Organ set / 3D	2	
2	Show abdominal organs (stomach, intestines, liver, pancreas, spleen)	Models / 3D	2	
3	Show organs of the genitourinary system (kidneys, bladder, uterus/prostate, etc.)	Models / 3D	2	
4	Show topographic lines and regions (abdomen, chest) on the model/diagram	Model / diagram	2	

5. Nervous System and Blood Vessels

Table 5. Nervous System and Blood Vessels (Basic Level)

No.	Skill	Materials (brain, nerve models, 3D)	Semester Date Level	Instructor's signature
1	Identify the parts of the brain (hemispheres, brainstem, cerebellum)	Specimen / model / 3D	2	
2	Show the parts of the spinal cord and their boundaries	Model / 3D	2	
3	Show major arteries (aorta, carotid, subclavian, etc.)	Diagram / 3D / models	2	
4	Show major veins (superior/inferior vena cava, jugular veins, etc.)	Diagram / 3D	2	

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6. Working with digital resources (Complete Anatomy, 3D anatomy)

This module is required for both **digitization** and accreditation.

Table 6. Proficiency with digital anatomical resources

No.	Type of activity	Platform (Complete Anatomy / others)	Date	Instructor's signature
1	Completed the assignment: assembling a 3D model of the skeleton with the main landmarks indicated	CA / 3D platform		
2	Completed the assignment: visualization of muscle layers by region	CA / 3D platform		
3	Task completed: trajectory of a blood vessel (e.g., femoral artery)	CA / 3D platform		
4	Prepared a mini-presentation on the anatomy of an organ/region using 3D	CA + presentation		

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7. Final page on normal anatomy

FINAL CONCLUSION
on practical skills in the course "Normal Anatomy"

Student: _____
Group: _____ Course: _____ Semester(s): ___

1. Total skills in the list: _____
2. Fully mastered (Level 3): _____
3. Partially mastered (Level 2): _____
4. Requires further work: _____

Conclusion of the instructor / Department of Anatomy:

☐ Practical skills in the discipline have been mastered at the minimum acceptable level.
☐ Additional practice is required for the following skills:

Instructor (responsible): _____ /Full Name, Signature/
Head of the Department of Anatomy: _____ /Full Name, Signature/
Date: **“___”_____20**

How to use in practice

1. Insert this section **at the end of the normal anatomy workbook** (as “Section 4. Practical Skills Logbook”).
2. Work with the department to add to or expand the list of skills (based on your calendar and thematic plan).

CHANGE LOG

Change No.	Basis for Amendment	Pages	Summary of the amendment	Revision	Signature	Date
1						
2						
3						

Edition:

Effective date: “ ” _____ 20

APPROVAL SHEET

№	Position / Role	Full Name	Signature	Date
1	Developed by	Kanetova D.E.		29.12.25
2	Approved: head of the responsible department	Ташиева Т.С		29.12.25
3	Approved: Head of the Educational and Informational Department	Kanetova D.E.		29.12.25
4	Approved: leading specialist for quality	Kalmuratova A.		29.12.25
4	Approved: head of the legal affairs and human resources department / lawyer	Sydykova B.J.		29.12.25
5	Approved: vice-rector for academic affairs	Sadyrova N.A.		29.12.25
6	Approved: vice-rector for science, SR and GE	Asilova Z.A.		29.12.25
7	Endorsed / considered in the established manner	JASU Scientific Council		29.12.25.