должность. Ректор Дата подписания: 01.06.2024 P2:52:45 riendship University of Russia named after Patrice Lumumba **RUDN University**

Institute of Medicine

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

COURSE SYLLABUS

HOSPITAL SURGERY, PEDIATRIC SURGERY

(course title)

Recommended by the Didactic Council for the Education Field of:

31.05.01 General Medicine

(field of studies/specialty code and title)

The course instruction id implemented within the professional education programme of higher education:

General Medicine

(higher education programme profile/ specialization title)

1. COURSE GOAL(s)

The discipline "Hospital Surgery, Pediatric Surgery" is included in the specialty program "General Medicine" in the direction of 31.05.01 "General Medicine" and is studied in the 9th, 10th, 11th, 12th semesters of the 5th and 6th courses. The discipline is implemented by the Department of Hospital Surgery with

course of pediatric surgery. The discipline consists of 4 sections and 53 topics and is aimed at studying nosological forms that were not included in the program of previous disciplines. During the training process, special attention is paid to the clinical education of students, the ability to comprehensively examine surgical patients and the ability to summarize the data obtained to construct a diagnosis and conduct differential diagnostics.

The main goal of the course is to teach students the ability to diagnose surgical diseases in their diverse manifestations, determine the choice of method for their treatment and prevention.

2. REQUIREMENTS FOR LEARNING OUTCOMES

The course is aimed at the development of the following competences:

| Competence code | Competence descriptor | Competence formation indicators |
|--------------------|---|---|
| GPC-4 | Capable of applying medical products, provided for by the procedure providing medical care, and carry out examination of the patient for the purpose making a diagnosis | GPC-4.1. Able to use medical devices in accordance with current procedures for the provision of medical care, clinical recommendations (treatment protocols) on the provision of medical care, assistance considering the standards of medical care. GPC-4.2. Able to evaluate effectiveness and safety use of medical devices. GPC-4.3. Possess the technique of performing typical medical procedures using medical devices provided for in the procedures for providing medical care. |
| PC-1 | Able to provide medical care to the patient in urgent or emergency forms | PC-1.1. Able to assess the condition of a patient requiring urgent or emergency medical care. PC-1.2. Able to recognize conditions arising from sudden acute diseases, exacerbation of chronic diseases without obvious signs of a threat to the patient's life and requiring emergency medical care. PC-1.3. Able to provide emergency medical care to patients with sudden acute diseases, conditions, exacerbation of chronic diseases without obvious signs of a threat to the patient's life. PC-1.4. Able to recognize conditions that pose a threat to the patient's life, including conditions of clinical death (stopping the vital functions of the human body (blood circulation and / or respiration), requiring emergency medical care. |

Tab. 2.1. List of the competences that students acquire during the internship

| Competence code | Competence descriptor | Competence formation indicators |
|--------------------|--|---|
| | | PC-1.5. Able to provide emergency medical care to patients in conditions that pose a threat to the patient's life, including clinical death (stopping the vital functions of the human body (blood circulation and/or respiration). PC-1.6. Able to use medicines and medical devices in the provision of medical care in emergency or urgent forms. PC-2.1. Masters the skills to collect complaints, |
| PC-2 | Able to exam the patient in order to establish a diagnosis | anamnesis of the patient's life and illness, as well as to conduct a complete physical examination of the patient (examination, palpation, percussion, auscultation). PC-2.2. Able to formulate a preliminary diagnosis and draw up a plan for laboratory and instrumental examinations of the patient. PC-2.3. Able to refer the patient for laboratory examination if there are medical indications in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical care. PC-2.4. Able to refer the patient for an instrumental examination if there are medical indications in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on the provision of medical care. PC-2.5. Able to refer the patient protocols) on the provision of medical care, taking into account the standards of medical care. PC-2.5. Able to refer the patient to a consultation with specialists if there are medical indications in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care, taking into account the standards of medical care. PC-2.6. Able to refer a patient for specialized medical care in an inpatient setting or in a day hospital if there are medical indications in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care. PC-2.7. Able to refer a patient for specialized medical care in an inpatient setting or in a day hospital if there are medical indications in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care. PC-2.7. Able to make a differential diagnosis with other diseases/conditions, including emergencies, as well as establish a diagnosis based on the current International S |

| Competence code | Competence descriptor | Competence formation indicators |
|--------------------|--|--|
| | | Problems. |
| PC-3 | Able to prescribe treatment and monitor its effectiveness and safety | PC-3.1. Able to develop a treatment plan for a disease or condition, taking into account the diagnosis, age and clinical picture in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care, taking into account the standards of medical care. PC-3.2. Able to prescribe medicines, medical devices and medical nutrition, taking into account the diagnosis, age and clinical picture of the disease and in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care, taking into account the diagnosis, age and clinical picture of the standards of medical care. PC-3.3. Able to prescribe non-drug treatment, taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for the provision of medical care, taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for the provision of medical care, taking into account the standards of medical care, taking into accoun |
| PC-4 | Capable of implementing and monitoring the effectiveness of the patient's medical rehabilitation, including the implementation of individual rehabilitation or habilitation programs for people with disabilities, assessing the patient's ability to carry out work activities | PC-4.1. Able to conduct an examination of temporary disability and work as part of a medical commission that carries out an examination of temporary disability |
| PC-6 | Capable of maintaining medical records and organizing the activities of | PC-6.3. Able to maintain medical documentation, including in electronic form. PC-6.4. Able to monitor the performance of job |

| Competence code | Competence descriptor | Competence formation indicators | |
|--------------------|------------------------------------|---|--|
| | nursing staff at their disposal | duties by the district nurse and other medical workers at his disposal. PC-6.5. Able to ensure internal control of the quality and safety of medical activities within the scope of job responsibilities. | |

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course "Hospital Surgery, Pediatric Surgery" refers to the core component of (B1) block of the higher educational programme curriculum.

Within the higher education programme students also master other disciplines (modules) and/or practices that contribute to the achievement of the expected learning outcomes as result of the course.

Tab. 3.1. The list of the higher education programme components that contribute to the achievement of the expected learning outcomes as the course result.

| Competence | Competence | Previous | Subsequent |
|------------|---|--|-----------------|
| code | descriptor | courses/modules | courses/modules |
| GPC-4 | Capable of applying medical products, provided for by the procedure providing medical care, and carry out examination of the patient for the purpose making a diagnosis | Biotechnology; General surgery; Pharmacology; Topographic anatomy and operative surgery; Neurology, medical genetics, neurosurgery; Radiation diagnostics; Bioorganic chemistry; Physics; Chemistry; Introductory practice on receiving primary professional skills: nursing (simulation center); Introductory practice on receiving primary professional skills and skills: nursing; Practice on receiving primary professional skills and abilities: assistant junior medical personnel; Diagnostic practice profile: ward assistant nurse; | |

| Competence | Competence | Previous courses/modules | Subsequent |
|------------|---|--|-----------------|
| code | descriptor | courses/modulesPractice in emergencymedical manipulations(simulation center);Practice on receivingprimary professionalskills and experienceprofessional activity:procedural assistantnurse;Ophthalmology;Propaedeutics ofinternal | courses/modules |
| PC-1 | Able to provide medical care to the patient in urgent or emergency forms | diseases; Obstetrics and gynecology; General surgery; Faculty Therapy; Faculty of Surgery; Neurology, medical genetics, neurosurgery; Emergency medicine for life-threatening conditions; Urology; Diagnostic practice profile: ward assistant nurse; Practice in emergency medical manipulations (simulation center); Practice on receiving primary professional skills and experience professional activity: procedural assistant nurse; | |
| | | Surgical practice profile: medical assistant surgeon; Obstetrics and gynecology practice: gynecologist assistant; | |
| PC -2 | Able to exam the patient in order to establish a diagnosis | Medical enzymology**; Molecular genetics in practical biology and medicine**; Ophthalmology; | |

| Competence | Competence | Previous | Subsequent |
|------------|-----------------------|-------------------------|-----------------|
| code | descriptor | courses/modules | courses/modules |
| | | Propaedeutics of | |
| | | internal | |
| | | diseases; | |
| | | Medical elementology; | |
| | | Obstetrics and | |
| | | gynecology; | |
| | | Immunology; | |
| | | Otorhinolaryngology; | |
| | | General surgery; | |
| | | Faculty Therapy; | |
| | | Faculty of Surgery; | |
| | | Microbiology, virology; | |
| | | Pathophysiology, | |
| | | clinical | |
| | | pathophysiology; | |
| | | Neurology, medical | |
| | | genetics, neurosurgery; | |
| | | Evidence-based | |
| | | medicine; | |
| | | Radiation diagnostics; | |
| | | Dermatovenerology; | |
| | | Molecular genetic | |
| | | methods; | |
| | | - | |
| | | Pathological anatomy, | |
| | | clinical pathological | |
| | | anatomy; | |
| | | Urology; | |
| | | Surgical practice | |
| | | profile: medical | |
| | | assistant | |
| | | surgeon; | |
| | | Obstetrics and | |
| | | gynecology practice: | |
| | | gynecologist assistant; | |
| | | Introduction to | |
| | | Nutrition**; | |
| | | Ophthalmology; | |
| | | Obstetrics and | |
| | | gynecology; | |
| | Able to prescribe | Otorhinolaryngology; | |
| | treatment and monitor | Faculty Therapy; | |
| PC -3 | its effectiveness and | Pharmacology; | |
| | safety | Faculty of Surgery; | |
| | Survey | Fundamentals of | |
| | | integrative | |
| | | medicine**; | |
| | | Neurology, medical | |
| | | genetics, neurosurgery; | |
| | | Dermatovenerology; | |

| Competence | Competence | Previous | Subsequent |
|------------|---|--|-----------------|
| code | descriptor | courses/modules | courses/modules |
| | | Basics of therapeutic | |
| | | nutrition; | |
| | | Clinical Trials**; | |
| | | Clinical researches**; | |
| | | Urology; | |
| | | Surgical practice | |
| | | profile: medical | |
| | | assistant | |
| | | surgeon; | |
| | | Obstetrics and | |
| | | gynecology practice: | |
| | | gynecologist assistant; | |
| | | Ophthalmology; | |
| | | Propaedeutics of | |
| | | internal | |
| | | diseases; | |
| | | Obstetrics and | |
| | | gynecology; | |
| | | Bioethics**; | |
| | | General surgery; | |
| | | Faculty Therapy; | |
| | | Faculty of Surgery; | |
| | | Public health and | |
| | Constitution of | healthcare, economics | |
| | Capable of | healthcare; | |
| | implementing and | Radiation diagnostics; | |
| | monitoring the | Biostatistics; | |
| | effectiveness of the | Urology; | |
| | patient's medical | Introductory practice on | |
| | rehabilitation, including | receiving primary | |
| PC -4 | the implementation of individual rehabilitation | professional skills and | |
| | | skills: nursing | |
| | or habilitation programs for people with | (simulation center); Introductory practice on | |
| | disabilities, assessing | receiving primary | |
| | the patient's ability to | professional skills and | |
| | carry out work | skills: nursing; | |
| | activities | Practice on receiving | |
| | activities | primary professional | |
| | | skills and abilities: | |
| | | assistant | |
| | | junior medical | |
| | | personnel; | |
| | | Practice on receiving | |
| | | primary professional | |
| | | skills and experience | |
| | | professional activity: | |
| | | procedural assistant | |
| | | nurse; | |
| | 1 | nurse, | |

| Competence | Competence | Previous | Subsequent |
|------------|---------------------------|---|-----------------|
| code | descriptor | courses/modules | courses/modules |
| | | profile: medical | |
| | | assistant | |
| | | surgeon; | |
| | | Obstetrics and | |
| | | gynecology practice: | |
| | | gynecologist assistant; | |
| | | Organization of special | |
| | | courses/modulescourses/modulesprofile: medical assistantassistantsurgeon;Obstetrics and gynecology practice: gynecologist assistant;organization of special care for the sick; Faculty Therapy; Faculty of Surgery; ining Public health and healthcare, economics wities | |
| | | | |
| | | Faculty Therapy; | |
| | | Faculty of Surgery; | |
| | Capable of maintaining | Public health and | |
| | medical records and | healthcare, economics | |
| PC-6 | organizing the activities | healthcare; | |
| | of nursing staff at their | Medical rehabilitation; | |
| | disposal | Neurology, medical | |
| | | genetics, neurosurgery; | |
| | | Surgical practice | |
| | | profile: medical | |
| | | assistant | |
| | | surgeon; | |

4. COURSE WORKLOAD

Course workload of the course "Hospital Surgery, Pediatric Surgery" is 10 credits (360 academic hours).

Tab. 4.1. Types of academic activities during the period of the HE programme mastering

| cluding: ectures (L) ab work (LW) eminars(S) elf-study, academic hours | Total | | Semesters | | | |
|--|---------|----------|-----------|-----|----|----|
| Types of academic activities | | ac.hours | 9 | 10 | 11 | 12 |
| Classroom learning | | 263 | 85 | 80 | 34 | 64 |
| including: | | | | | | |
| Lectures (L) | | - | - | - | - | - |
| Lab work (LW) | | 263 | 85 | 80 | 34 | 64 |
| Seminars(S) | | - | - | - | - | - |
| Self-study, academic hours | | 61 | 17 | 10 | 29 | 5 |
| Evaluation and assessment (exam or pass/fail grading) | | 36 | 6 | 18 | 9 | 3 |
| Course workload | ac.h. | 360 | 108 | 108 | 72 | 72 |
| Course workload | credits | 10 | 3 | 3 | 2 | 2 |

5. COURSE CONTENTS

Tab. 5.1. Course contents

| Title of the course section | Contents of the section (topics) | Types of academic activities |
|--------------------------------|---|------------------------------------|
| Section 1 | Topic 1.1. Anatomy of the cardiovascular system. | LW |
| Cardiovascular | General issues of diagnosis and treatment of | |
| Surgery | diseases of the heart and blood vessels (ultrasound, | |
| | CT, radioisotope studies, etc.). | |
| | Topic 1.2. Congenital malformations of blood vessels. Traumatic vascular injury. | LW |
| | Topic 1.3. Acute arterial thrombosis and embolism. | LW |
| | Topic 1.4. Aneurysms of the aorta and arteries. | LW |
| | Topic 1.5. Stenosing diseases of the branches of the aorta. | LW |
| | Topic 1.6. Varicose veins of the lower extremities. | LW |
| | Topic 1.7. Thrombophlebitis and | LW |
| | phlebothrombosis. Pulmonary embolism. | |
| | Topic 1.8. Chronic venous insufficiency. Post-thrombophlebitic syndrome. | LW |
| | Topic 1.9. Diseases of the lymphatic system. | LW |
| | Topic 1.10. Endovascular methods for the treatment of diseases of the heart and blood vessels. | LW |
| | Topic 1.11. Congenital heart defects. | LW |
| | Topic 1.12. Acquired heart defects. | LW |
| | Topic 1.13. Ischemic heart disease and its complications. | LW |
| | Topic 1.14. Pathology of the conduction system of the heart. | LW |
| | Topic 1.15. Pathology of the pericardium (pericarditis, tamponade, cysts, tumors of the pericardium). | LW |
| | Topic 1.16. Pathology of the myocardium (myocarditis, cardiomyopathy). | LW |
| | Topic 1.17. Tumors of the heart. | LW |
| Section 2 Pediatric Surgery | Topic 2.1. Peculiarities of childhood surgery: goals and objectives, history of development. | LW |
| | Topic 2.2. Anatomical and physiological features of the child's body. | LW |
| | Topic 2.3. Features of purulent surgical infection in children. | LW |
| | Topic 2.4. Soft tissue ulcers: phlegmon of newborns, omphalitis, purulent mastitis, pseudofurunculosis. | LW |
| | Topic 2.5. Acute hematogenous osteomyelitis in children. | LW |
| | Topic 2.6. Acute purulent destructive pneumonia in children. | LW |
| | Topic 2.7. Surgical pathology of the lungs in children: congenital malformations of the lungs, | LW |

| Title of the course section | Contents of the section (topics) | Types of academic activities |
|-------------------------------|--|------------------------------------|
| | bronchiectasis, foreign bodies of the trachea and | |
| | bronchi. | |
| | Topic 2.8. Acute appendicitis in children. | LW |
| | Topic 2.9. Peritonitis of newborns and infants. | \mathbf{LW} |
| | Etiology, diagnosis, treatment. | |
| | Topic 2.10. Acute intestinal obstruction in children (congenital and acquired). | LW |
| | Topic 2.11. Malformations of newborns. | LW |
| | Topic 2.12. Esophageal atresia, diaphragmatic | |
| | hernia, pyloric stenosis, anal atresia. | |
| | Topic 2.13. Inguinal hernia and dropsy of the | LW |
| | testicles, varicocele, phimosis, cryptorchidism in | |
| | children. | |
| | Topic 2.14. Peculiarities of childhood | LW |
| | traumatology, trauma of skeletal bones, chest, | |
| | abdomen and craniocerebral trauma. | |
| Section 3 | Topic 3.1. Acute appendicitis | |
| Abdominal Surgery | Topic 3.2. Diseases of the gallbladder. | |
| | Topic 3.3. Diseases of the extrahepatic bile ducts. | LW |
| | Topic 3.4. Diseases of the pancreas. | LW |
| | Topic 3.5. Diseases of the liver. | LW |
| | Topic 3.6. Diseases of the stomach and duodenum. | LW |
| | Topic 3.7. Diseases of the operated stomach. | LW |
| | Topic 3.8. Diseases of the intestines. | LW |
| | Topic 3.9. Acute intestinal obstruction. | \mathbf{LW} |
| | Topic 3.10. Peritonitis. | LW |
| Section 4 Thoracic Surgery | Topic 4.1. General issues of diagnosis and treatment of lung diseases. | LW |
| | Topic 4.2. Injuries to the chest, trachea, bronchi, | LW |
| | lungs and pleura. Topic 4.3. Diseases of the chest wall and pleura. | T 337 |
| | · · · | LW LW |
| | Topic 4.4. Damage and foreign bodies of the | |
| | esophagus. | LW |
| | Topic 4.5. Burns and cicatricial strictures of the | |
| | esophagus. | T XX7 |
| | Topic 4.6. Tumors of the esophagus. | |
| | Topic 4.7. Diseases of the trachea. | |
| | Topic 4.8. Benign and malignant tumors of the lung. | LW |
| | Topic 4.9. Diagnosis and treatment of tumors and cysts of the mediastinum. | LW |
| | Topic 4.10. Diaphragm diseases. | LW |
| | Topic 4.11. Malformations, cysts and diverticula of | |
| | the esophagus. Topic 4.12. Neuromuscular diseases of the esophagus. | LW |

6. COURSE EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

| Classroom for Academic Activity Type | Classroom equipment | Specialized educational / laboratory equipment, software and materials for mastering the discipline |
|--|---|--|
| Laboratory Classroom | An auditorium for conducting laboratory work, individual consultations, ongoing monitoring, and intermediate certification, equipped with a set of specialized furniture and equipment. | A set of specialized furniture; a set of devices includes: a multimedia projector, a laptop, a set of dummies, a set of educational videos and presentations, a set of analog and digital radiographs, tomograms, sonograms, educational posters and tables. |
| Self-studies Classroom | Classroom for self-study of students (can be used for seminars and consultations), equipped with a set of specialized furniture and computers with access to the Electronic Information Educational Environment. | |

Tab. 6.1. Course equipment and technology support requirements

7. RESOURCES RECOMMENDED FOR COURSE

a) main readings:

1. Qualification Tests for Pediatric Surgery = Квалификационные тесты по хирургиидетского возраста: training manual / Bachoo M.R.H., P.I. Manzhos, A.A. Imanalieva [et al.]. -Электронные текстовые данные. - Москва: РУДН, 2022. - 225 с. - Книга на английскомязыке.-ISBN978-5-209-11075-0:135.50.https://lib.rudn.ru:443/MegaPro/UserEntry?Action=Link_FindDoc&id=505335&idb=0

2. General surgery. The manual / V.K. Gostishchev. - Электронные текстовые данные. -Moscow: GEOTAR-Media, 2020. - 220 р. - Книга на английском языке. - ISBN 978-5-9704-5439-8. <u>https://lib.rudn.ru:443/MegaPro/UserEntry?Action=Link_FindDoc&id=497901&idb=0</u>

3. Surgical Treatment of Bradyarrhythmias = Хирургическое лечение брадиаритмий: tutorial / V.Y. Baranovich, A.G. Faibushevich, Bachoo M.R.H. [et al.]. - Книга на английском языке; электронные текстовые данные. - Moscow: PFUR, 2019. - 234 р.: il. - ISBN 978-5-209-09450-0: 327.53.

https://lib.rudn.ru:443/MegaPro/UserEntry?Action=Link_FindDoc&id=484279&idb=0

4. Основные вопросы детской хирургии = Basic Questions in Pediatric Surgery / Бачу Мохамед Рафик Хуссейн, П.И. Манжос, А.Г. Файбушевич [и др.]. - Книга на английском языке; электронные текстовые данные. - М.: РУДН, 2018. - 318 с.: ил. - ISBN 978-5-209-08990-2: 232.79.

https://lib.rudn.ru:443/MegaPro/UserEntry?Action=Link_FindDoc&id=471847&idb=0

5. Abdominal Surgery in Questions and Answers: educaitional-Methodical Handbook / Ф.С. Курбанов, М.А. Чиников, А.Г. Файбушевич [et al.]. - Электронные текстовые данные. - М.: PFUR, 2018. - 78 с. - Книга на английском языке. - ISBN 978-5-209-08750-2: 48.74. https://lib.rudn.ru:443/MegaPro/UserEntry?Action=Link_FindDoc&id=468679&idb=0

b) Additional readings:

1. Topographic Anatomy and Operative Surgery: textbook / A.V. Nikolaev. - Москва: ГЭОТАР-Медиа, 2021. - 672 с. - Книга на английском языке. - ISBN 978-5-

9704-6095-5.

https://lib.rudn.ru:443/MegaPro/UserEntry?Action=Link_FindDoc&id=497916&idb=0

Internet-(based) 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/

The training toolkit and guidelines for a student to do a course:*

1. Guidelines for the implementation and execution of control work and self-study in the discipline "Hospital Surgery, Pediatric Surgery"

*The training toolkit and guidelines for the course are placed on the course page in the university telecommunication training and information system under the set procedure.

8. ASSESSMENT AND EVALUATION TOOLKIT

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 based on the relevant local normative act of RUDN University (regulations/order).

DEVELOPERS:

Assistant, Department of Hospital Surgery with the Course of Pediatric Surgery Position, Department Signature

Gitelzon E.A.

Surname, initials

HEAD OF THE DEPARTMENT:

Department of Hospital Surgery with the Course of Pediatric Surgery Department

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Faybushevich A.G.

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HEAD OF THE HIGHER EDUCATION PROGRAM:

Sturov N.V. Head of the Department of General **Medical Practice** Position Signature

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