Approved

арании (Огоро) the decision of the Academic Council of General Medicine Faculty деканатоп November 12, 2024. Protocol No. 9. печебного факультета Сhairman of the Academic Council of General Medicine Faculty, of General Medicine Faculty, Doctor of Medical Sciences, Professor

"GENERAL MEDICINE" State Exam Program for 2024-2025 academic year

The "General Medicine" state exam program is developed according to the Federal law "On Education in Russian Federation" of 29.12.2012 №273-ФЗ, the Procedure of organization and implementation of educational activities in educational programs of higher education bachelor programs, specialty programs, master programs, approved by the Order of the Ministry of Education and Science dated 06.04.2021 № 245, Federal State educational standard of higher education in the specialization "General Medicine" of 16.02.2016 (Federal State Educational Standard of Higher Education in the specialty 31.05.01 General Medicine), the Procedure of conducting the state graduation exam in educational programs of higher education - bachelor programs, specialty programs, master programs, approved by the Order of Ministry of Education and Science dated 29.06.2015 № 636, the Order of the Ministry of Education and Science of 27.03.2020 г. № 490 "On Introducing Amendments to Several Orders of the Ministry of Education and Science of Russia, Related to Conducting the State Graduation Exam in Educational Programs of Higher Education", Regulations on the procedure for conducting the state exam in educational programs of higher education - specialty programs of FSBEI HE «Ivanovo SMU» of MOH of Russia dated 24.10.2023 (with amendments to the Regulations dated 23.05.2024).

I. General Concepts

1.1. The "General Medicine" state exam for the students of FSBEI HE «Ivanovo SMU» of MOH of Russia (hereinafter referred to as "**the University**") is conducted to determine if the results of studying the educational program meet the requirements of the Federal State educational standard of higher education in the specialization "General Medicine".

1.2. By the state exam, the students' general social, professional and vocational competences level in the specialization "General Medicine" is evaluated.

1.3. A student, who has no academic arrears and has completed the academic plan and his personal plan of "General Medicine" higher education, is permitted to take the state exam.

1.4. After successfully passing the state exam, the alumnus is awarded the specialist's degree and the specialist's diploma confirming his qualifications; the diploma sample is approved by the Ministry of Education and Science of Russia.

1.5. The "General Medicine" state exam is an oral final interdisciplinary specialization examination. In case of emergency or a disaster threat, or a special emergency regime having been set throughout the territory of Russian Federation or in its part, the state exam may be organized by using electronic communication means.

1.6. The Examination Board is created to conduct the "General Medicine" state exam.

The Appeals Board is created as a result of the "General Medicine" state exam to consider appeals.

The Examination Board and the Appeals Board act during one year period.

1.7. Students and assisting staff in the state exam are not allowed having and using communication devices except those of the state graduation exam technical support.

2. The Procedure of the State Exam

2.1. The students must be reported of the state exam program, evaluation and assessment criteria as well as the procedure of filing and judging appeals, no later than 6 months before the beginning of the state graduation exams.

2.2. The Academic Council of General Medicine Faculty approves the "General Medicine" state exam program, that includes exam questions list and self-study guide with the list of recommended literature. Pre-examination consultations will be held on the questions list before the final exam.

2.3. The Chancelor of the University approves the state exam stages Schedule; after that it must be reported to students, to the chairmen and the members of the Examination and Appeals Boards, to the secretary of the Examination Board no later than 30 days before the examination day. The schedule contains the dates, time and locations of the state exam stages and pre-examination consultations.

2.4. The state exam helps determine if the student have developed his general social, professional and vocational competences, theoretical and practical readiness (ability) to perform his professional duties, established by the Federal State educational standard of higher education in the specialization "General Medicine" according to the type of profession:

- medical activities:

preventing infectious diseases within the population by taking prophylactic and antiepidemic measures;

carrying out preventive medical checkups, health examinations, health supervision;

collecting and analyzing the medical and statistical information on health indicators for different age and gender groups, effecting their health;

diagnostics of patients' diseases and pathological conditions;

diagnostics of emergencies;

diagnostics of pregnancy;

examination of temporary incapacity for work and participating in other types of medical examination;

providing primary health care in outpatient and day-care settings;

providing primary health care in sudden acute illnesses, conditions, exacerbations of chronic diseases, that are not life-threatening and do not require urgent medical care;

participating in emergency medical care in conditions, requiring urgent medical care;

providing medical care in emergencies, including assisting medical evacuation;

participating in medical rehabilitation and sanatorium treatment;

motivating the population, patients and their families to preserve and improve their own health and the health of people around them;

training patients hygienic and wellness basic activities that help prevent diseases and improve health;

- organizational and management activities:

applying medical care management basic principles in health-care organizations and their subdivisions;

creating an enabling environment for patients and medical staff in health-care organizations;

medical record-keeping in health-care organizations;

organizing and conducting a medical examination;

participating in the organization of health care quality assessment;

compliance with the information security basic requirements;

- scientific research:

analyzing science literature and official statistical reviews, participating in statistical analysis and publicly introducing the results;

participating in solving selected research and applied tasks in the field of diagnostics, treatment, medical rehabilitation and prevention.

2.5. The "General Medicine" state exam is to be held in three stages:

1. Exam testing. The test's results are assessed as "pass" or "fail".

2. Practical training. This stage results are assessed as "completed" or "not completed".

3. *Final interview*. The results of the interview are graded in five-point scale (excellent, good, satisfactory, poor/fail).

2.6. The final grade on the interdisciplinary state exam is set by the Examination Board based on the results of passing three exam stages. The "excellent", "good" and "satisfactory" grades mean that the state exam is successfully passed.

2.7. The state exam stages results are announced at the day of holding.

2.8. The Examination Board issues its decisions as protocols. This protocol contains:

- questions list given to the student and the features of his answers to them,

- set of opinions of the chairman and the members of the Examination Board about the level the student is prepared to carry out his professional tasks, and also about the shortcomings identified in theoretical and practical training the student.

The Examination Board protocols get signed by the chairman and the secretary. The protocols, folded into books, are stored in the University archive.

3. The Organization of the State Exam, Using Electronic Communication Means and the Distance Learning System

3.1. The following services could be used for remote interaction between students and the Examination Board:

- The University electronic educational environment (UEEE);

- online video conference service with messaging and content sharing.

3.2. The pre-examination consultations on exam questions take place by using UEEE and video conference.

3.3. Three stages of the state exam, using electronic means:

- 1st stage using the distance learning system,

- 2^{nd} and 3^{rd} stages as a video conference.

Three stages of the state exam, partly using electronic means:

- 1st stage using the distance learning system,

- 2nd and 3rd stages as a full-time exam.

3.4. The students are reported of conducting the state exam by using electronic means, as well as of the date, time and service used for communication, by e-mail to the address given by the student.

3.5. The "General Medicine" state exam by using electronic means is conducted according to "The Regulations on the Procedure for Conducting the State Exam in Educational Programs of Higher Education – Specialty programs of FSBEI HE «Ivanovo SMU» of MOH of Russia".

4. The Procedure for Appealing the Results of the State Exam

4.1. The student has the right to file a written appeal to the Appeals Board, if he believes that the procedure of the state exam was violated, or he doesn't agree with the results of the state exam, according to "The Regulations on the Procedure for Conducting the State Exam in Educational Programs of Higher Education – Specialty programs of FSBEI HE «Ivanovo SMU» of MOH of Russia".

"General Medicine" State Exam Preparation Guide 1. Competences List to be Evaluated During the "General Medicine" State Exam

General Cultural Competences

OK-1/GC-1 – abstract thinking, analysis and synthesis abilities

OK-2/GC-2 – able to use philosophic basic knowledge in order to form a worldview position

OK-3/GC-3 – able to analyze the main stages and historical patterns of social development in order to form a civil position

OK-4/GC-4 – able to act in unusual situations, capable of bearing social and ethical responsibility for decisions made

OK-5/GC-5 – capable of self-development, self-realization, self-improvement, using personal creativity

OK-6/GC-6 – able to use physical training methods and tools in order to carry out social and professional activities in full

OK-7/GC-7 – capable of using first aid techniques and life-saving methods in emergency situations

OK-8/GC-8 – capable of team-working, tolerant acceptance of social, ethnical, confessional and cultural differences

General Professional Competences

 $O\Pi K-1/GPC-1$ – can solve standard problems in his professional activities, using information, bibliography resources, medical-biology terms, informational and communicational technologies taking into account the information security basic requirements

OIIK-2/GPC-2 – capable of verbal and written communication in Russian and foreign languages to carry out professional tasks

OIIK-3/GPC-3 – able to use economy and legal basic knowledges in professional activities

OIIK-4/GPC-4 – able to implement ethical and deontological principles in professional activities

OIIK-5/GPC-5 – capable of analyzing the results of his work in order to prevent professional errors

ΟΠΚ-6/GPC-6 – able to keep medical records, including digital records

OIIK-7/GPC-7 – able to use physical-chemical, mathematic and other natural-science terms and methods in solving professional tasks

OIIK-8/GPC-8 – able to apply medicines and other substances and their combinations in solving professional tasks

 $O\Pi K-9/GPC-9$ – can identify morpho functional, physiological conditions and pathological processes in the human body in order to solve professional tasks

OIIK-10/GPC-10 – able to carry out nursing and first aid manipulations

OIIK-11/GPC-11 – can apply medical devices in accordance with current procedures for medical care

Professional Competences

 Π K-1/PC-1 – able to develop a plan of wellness and health-care activities in order to cultivate a healthy lifestyle in population, prevent onsets and spread of diseases, carry out early diagnostics, discover causes and conditions of diseases and eliminate harmful ecological factors for people

 $\Pi K-2/PC-2$ – able to carry out preventive medical check-ups, health examinations, health supervision

IIK-3/PC-3 – capable of conducting anti-epidemic measures and organizing the protection of the population in hotbeds of particularly dangerous (quarantine) infectious diseases, radiation contamination, natural disasters and other emergency situations

IIK-4/PC-4 – capable of applying social-hygienic methods of collecting health-index information and medical-social analysis

IIK-5/PC-5 – able to collect and analyze patient's complaints and anamnesis, evaluate the results of examinations, clinical, laboratory, functional diagnostics, pathology anatomical examination and others, in order to recognize the condition or establish the presence or absence of the disease

IIK-6/PC-6 – can identify pathological conditions in patients, symptoms and syndromes of diseases, nosological forms in accordance with "The International Statistical Classification of Diseases and Related Health Problems, 10^{th} Revision"

 Π K-7/PC-7 – capable of carrying out the examination of temporary incapacity for work, participating in medical social expert assessment, confirming a person's biological death

IIK-8/PC-8 – able to develop treatment plans for patients with different nosological forms

 $\Pi K-9/PC-9$ – able to manage and treat patients with different nosological forms in outpatientcare and day-care settings

 Π K-10/PC-10 – able to provide medical assistance in sudden acute illnesses, conditions, exacerbations of chronic diseases, that are not life-threatening and do not require urgent medical care

 $\Pi K-11/PC-11$ – can participate in emergency medical care in conditions, requiring urgent medical care

IIK-12/PC-12 – able to manage physiological pregnancy, deliver a baby

 Π K-13/PC-13 – can provide medical care in emergencies, including participation in medical evacuation

 Π K-14/PC-14 – able to identify the necessity of using natural healing factors, medication and non-medication therapy, and other methods in patients, who need medical rehabilitation and sanatorium treatment

 Π K-15/PC-15 – capable of training patients and their relatives hygienic and wellness basic activities, self-control skills of basic health indicators, that help prevent diseases and improve health

 Π K-16/PC-16 – capable of educational activities to raise public awareness of health risk factors and healthy life-styles

 Π K-17/PC-17 – capable of applying organizing and managing principles in the field of public healthcare in medical organizations and their subdivisions

IIK-18/PC-18 – capable of participating in health care quality assessment by using medical statistics basic indicators

 $\Pi K-19/PC-19$ – capable of organizing medical care in emergencies, including medical evacuation

IIK-20/PC-20 – able to analyze and publicly present medical information using evidence-based medicine

IIK-21/PC-21 – able to take part in scientific research

IIK-22/PC-22 – capable of participating in public healthcare innovations

2. Questions List for the "General Medicine" State Exam

General Medical Problems

1.1. Public health and healthcare

Public health criteria (indicators) and their determination.

The main factors determining the health of the population.

Types of Prevention measures, its main tasks and indicators of its effectiveness.

Population health study methods. The role of medical statistics in studying health of different age and gender groups, as well as in activities of main medical and preventive healthcare institutions.

Legal basis for healthcare authorities and institutions.

Healthcare systems; the features of the Russian healthcare.

The main principles of organizing healthcare institutions, their structure and activities indicators. Outpatient and day-care features of a doctor's work.

1.2. Medical ethics

Moral and ethical standards for 'doctor – patient', 'doctor – doctor', 'doctor – nursing staff', 'doctor – patient's relatives' relationships. Medical confidentiality. Doctor's responsibility for professional violations.

1.3. Age and gender features of human body.

1.4. Sanitary epidemic patterns of the onset, development and spread of diseases.

1.5. The role of immune disorders in the pathogenesis of various diseases, humoral and cellular immunity.

Conditions and Diseases List

For each condition and disease, students need to know:

- etiology and pathogenesis;

- modern classification;

- clinical picture, course features and possible complications of diseases in various age groups;

- syndromology of damaging various organs and systems by using knowledge gained in applied disciplines;

- diagnostical methods that help formulate a diagnosis;

- justification of the patient management tactics, medication and non-medication treatment methods, prevention, determination of the prognosis.

I. Infectious and parasitic diseases

Intestinal infections and invasions: belly typhus, paratyphs, dysentery, salmonellosis, foodborne toxic infection, cholera, botulism, viral hepatitis, yersiniosis, amoebiasis, giardiasis, helminthiasis.

Airborne infections: SARS, SARS croup syndrome, influenza, adenovirus infection, herpes infection, rubella, measles, chickenpox, whooping cough, diphtheria, scarlet fever, mumps, meningococcal infection, infectious mononucleosis, mycoplasma infection, poliomyelitis, tuberculosis.

Vector-borne infections: (spotted) typhus, malaria.

Anthropozoonous infections: brucellosis, plague, tularemia, anthrax, hemorrhagic fever with renal syndrome, rabies.

Infections of the external integuments: erysipelas, tetanus.

Infections transmitted mostly sexually: gonorrhea, syphilis, AIDS (HIV infection), chlamydia, trichomoniasis.

Fungal lesions.

II. Neoplasms (in all the organ systems – malignant and benign)

III. Diseases of the blood and hematopoietic organs

Anemia: posthemorrhagic, iron deficiency, B_{12} -folate deficiency, aplastic, hemolytic congenital and acquired (immune and non-immune). Pancytopenia, agranulocytosis.

Hemorrhagic syndromes: thrombocytopenia, hemophilia, Randu-Osler disease, hemorrhagic vasculitis, DIC syndrome, hemolytic disease of newborns, radiation sickness.

Hemoblastoses: acute leukemia in children and adults, chronic leukemia, myeloma, true polycythemia (erythremia); lymphomas (lymphogranulomatosis and others). Leukemoid reactions.

Blood transfusion reactions.

Eosinophilia.

IV. Endocrine diseases and metabolic disorders.

Thyroid diseases: endemic goiter, diffuse toxic goiter, adenomas, cancer, thyroiditis, hypothyroidism, myxedema. Hyper- and hypoparathyroidism.

Pituitary-hypothalamic disorders: acromegaly, nanism, Itsenko-Cushing's disease, diabetes insipidus.

Type 1 and 2 diabetes mellitus, ketoacidosis, hyperosmolar coma, macro- and microangiopathies. Hypoglycemia, hyperinsulinism.

Adrenal glands diseases: glucosteroma (Itsenko-Cushing syndrome), aldosteroma (Conn syndrome), pheochromocytoma, adreno-genital syndrome, adrenal insufficiency.

Ovarian diseases: hyperestrogenism, hypogonadism, sclerocystic ovarian syndrome (Stein-Leventhal). Mastopathy.

Metabolic disorders: obesity, dyslipidemia, hepatolenticular degeneration (Wilson-Konovalov disease), hemochromatosis.

V. Mental illnesses

Neuroses (neurasthenia, hysteria), phobias, anxiety, mood disorders.

Violations related to alcoholism and drug addiction. Alcoholic psychoses, acute alcohol intoxication.

Schizophrenia, manic-depressive psychosis. Involutional psychosis.

Sexual disorders: vaginismus, hypersexuality, impotence, frigidity.

VI. Nervous system diseases

Neuritis and neuralgia, polyneuropathy, discogenic radiculopathy in spine diseases.

Brain vascular diseases: cerebral circulation acute disorders (stroke, thrombosis, embolism), subarachnoid bleeding, increased intracranial pressure syndrome; dyscirculatory encephalopathy, perinatal encephalopathy.

Infectious diseases: meningitis, encephalitis, AIDS (HIV infection), abscess, neurosyphilis, myelitis.

Slow infections: Parkinson's disease, Huntington's chorea.

Different: myasthenia, cerebral palsy, migraine, epilepsy.

Enuresis.

VII. Eye diseases

Acute conjunctivitis, dacryocystitis, blepharitis, barley; retinopathy in internal diseases; myopia, hyperopia, strabismus, astigmatism, cataract, glaucoma, keratitis, retinal detachment, blindness.

VIII. Diseases of the ear and mastoid process

Deafness, hearing loss, otitis media, mastoiditis, otosclerosis, neuritis of the auditory nerve, Meniere's disease.

IX. Diseases of the circulatory system

Endocardial diseases: rheumatic and infectious endocarditis, acquired heart defects.

Congenital malformations: open ductus arteriosus, defects of the atrial and interventricular septum, Fallot tetrad, coarctation of the aorta.

Myocardial diseases: myocarditis, cardiomyopathy, myocardial dystrophy.

Pericardial diseases: fibrinous, exudative, constrictive pericarditis, cardiac tamponade, traumatic heart injuries.

Arterial hypertension: essential (primary) hypertension, symptomatic hypertension. Neurocirculatory dystonia.

Atherosclerosis, dyslipidemia. Coronary heart disease: angina pectoris, myocardial infarction. Dissecting aortic aneurysm.

Circulatory insufficiency: acute (cardiac asthma, pulmonary edema, shock), chronic congestive.

Cardiac arrhythmia and conduction disorders: extrasystole, atrial flicker and flutter, paroxysmal tachycardia, ventricular fibrillation, asystole, blockages.

Peripheral artery diseases: endarteritis, atherosclerosis, thrombosis, embolism. Venous diseases: varicose veins, thrombosis, thrombophlebitis, chronic venous insufficiency, cellulite.

Pulmonary vascular diseases: thrombosis and embolism of the pulmonary artery; lung infarction, pulmonary hypertension, pulmonary heart.

X. Respiratory diseases

Nasal diseases, paranasal sinuses, pharynx, larynx, trachea diseases: rhinitis, sinusitis, pharyngitis, tonsillitis, sore throat, peritonsillar abscess; acute laryngotracheitis; obstruction of the larynx, pharynx; injuries.

Lung infections: acute bronchitis, pneumonia, abscess, tuberculosis.

Obstructive pulmonary diseases: chronic obstructive bronchitis, COPD, bronchiectatic disease; bronchial asthma, pulmonary emphysema; atelectasis, aspiration.

Pneumoconiosis (silicosis, asbestosis and others) and fibrotic diseases (alveolitis, sarcoidosis).

Respiratory failure: acute and chronic, including acute respiratory distress syndrome in children and adults.

Pleural diseases: pleurisy, pneumothorax, hemothorax.

XI. Diseases of the digestive system

Diseases of the oral cavity, teeth, salivary glands, oropharynx.

Esophageal diseases: GERD, cardiospasm.

Stomach diseases: acute and chronic gastritis, gastric ulcer.

Intestinal diseases: non-infectious enteritis and colitis, duodenal ulcer, irritable bowel syndrome, Crohn's disease, ulcerative colitis, malabsorption syndrome, appendicitis, intestinal obstruction, mesenteric vascular thrombosis, diverticulosis, hemorrhoids, anal fissures, paraproctitis. Dysbiosis. Gastrointenstinal bleeding.

Hernia: diaphragmatic, epigastric (through the linea alba), femoral, inguinal, umbilical, postoperative.

Peritonitis.

Pancreatic diseases: pancreatitis, cystic fibrosis, gastrinoma (Zollinger-Ellison syndrome).

Diseases of liver and biliary tract: hepatitis, cirrhosis, echinococcosis, abscess, liver failure, jaundice; portal hypertension, ascites. Cholelithiasis, cholecystitis, cholangitis. Postcholecystectomy syndrome. Biliary tract functional disorders.

XII. Diseases of the skin and subcutaneous tissue

Infections of the skin and subcutaneous tissue: furuncle, carbuncle, panaritium, hydradenitis, abscesses, herpes simplex, shingles; pyoderma, acne; dermatophytosis (trichophytia).

Inflammatory diseases of the skin and subcutaneous tissue: exogenous dermatitis, eczema, psoriasis, lichen, erythema, urticaria, pemphigus

Trophic ulcers, gangrene.

XIII. Diseases of the musculoskeletal system and connective tissue

Inflammatory diseases: acute rheumatic fever, rheumatoid arthritis, ankylosing spondylitis, systemic lupus erythematosus, systemic scleroderma, dermatomyositis, rheumatic polymyalgia, polyarteritis nodosa; bursitis, tendovaginitis.

Infectious: osteomyelitis, septic arthritis, tuberculosis of joints, bones.

Degenerative: osteoarthritis, osteochondrosis of the spine, Dupuytren's contracture, shoulder impingement syndrome.

Metabolic: osteoporosis, chondrocalcinosis, gout, rickets.

Congenital malformations and developmental defects: congenital dislocation of the hip; torticollis, scoliotic disease, flat feet, aseptic necrosis of the femoral head, myopathy.

XIV. Diseases of the genitourinary system

Diseases of the urinary system: acute and chronic glomerulonephritis, renal amyloidosis, nephrotic syndrome; acute kidney failure and chronic kidney disease. Acute and chronic pyelonephritis, urolithiasis, paranephritis, nephroptosis, polycystosis, kidney infarction.

Pyelitis, cystitis, urethritis, urinary tract obstruction, hydronephrosis, urinary incontinence, enuresis. Urethral stricture, ureterolithiasis.

Diseases of male genital organs: prostatitis, adenoma, orchoepididymitis, varicocele, dropsy of the testicle and spermatic cord. Seminoma, cryptorchidism, phimosis, paraphimosis, balanoposthitis, impotence, male infertility.

Breast diseases.

Inflammatory and noninflammatory diseases of female pelvic and genital organs: vulvitis, bartholinitis, colpitis, endometritis, salpingoophoritis, tubovarial tumors, parametritis, pelvioperitonitis, peritonitis; endometriosis, uterine myoma, background and precancerous diseases of the female genital organs; amenorrhea, dysfunctional uterine bleeding, algomenorrhea, infertility; acute abdomen in gynecology.

XV. Pregnancy, childbirth, postpartum and neonatal periods

Features of managing pregnancy, childbirth and the postpartum period in their physiological course and in cases of complications. Family planning. Contraception, sterilization.

XVI. Congenital anomalies [malformations], deformities and chromosomal abnormalities (across all organ systems)

XVII. Symptoms, signs and abnormalities not classified above (Extreme and terminal conditions).

Coma, delirium, dementia, fainting, ataxia, sleep disorders.

XVIII. Injures

Injuries of various localization. Foreign bodies. Electric shock, frostbite of various localization.

Drowning, hanging; aspiration, compression and other types of asphyxia.

Bites and stings. Anaphylactic shock.

Medications and toxic substances poisoning.

High temperature, light and chemicals exposure effects.

In addition, the student should *know*:

• general issues of organizing medical care for the population

• the basics of the Russian Federation legislation on healthcare and regulatory legal acts determining the activities of medical organizations;

• issues of organizing and conducting examinations of temporary disability of patients, as well as determining medical indications for employment, transfer to easier working conditions, spa treatment;

• rules for preparing documentation required for conducting medical and social examination;

• basic medical and statistical indicators;

- issues of organizing non-specific and specific prevention of major infectious and non-infectious diseases;
 - criteria for assessing the quality of medical care;
 - organization of medical monitoring of the health of the population.

3. Practical Skills List for the "General Medicine" State Exam

General medical skills:

- Conducting basic cardiopulmonary resuscitation
- Stopping external bleeding by: pressing the vessel, applying a pressure bandage, applying a tourniquet
- Performing medication injections (intramuscular, subcutaneous, intradermal, intravenous), calculation of doses and medicine dilutions
- Preparing an intravenous infusion system and conducting intravenous transfusion of liquids
- Preparing a set of tools, materials, medicines and carrying out a primary surgical treatment of the wound
- Applying bandages to all body areas
- Conducting an external examination of pregnant women in early and late pregnancy
- Delivering a physiological childbirth

First aid skills

Emergency care in:

- Acute left ventricular failure (pulmonary edema)
- Poisoning and intoxication
- Acute dehydration
- Shock of various origins
- Hypertensive crisis (uncomplicated, complicated)
- Fainting, collapse
- Acute allergic reactions
- Bronchial asthma attack

- Anginal status
- Hypoglycemic coma
- Sudden cardiac death
- Morgagni-Adams-Stokes attack

Practical skills when working with a patient

- Collecting patient's complaints, illness and life anamnesis,
- Physical checkup of patients with various pathologies according to the algorithm (examination, palpation, percussion and auscultation of organs and systems)
- Checkup results assessment, syndromes identification, making a preliminary diagnosis
- Drawing up a plan for the patient's additional examination
- Tests results evaluation:
 - 1. TBC, UDT, Nechiporenko, Zimnitsky urine tests, daily urinal protein loss, microalbuminuria urine test, coprogram, sputum test;
 - Biochemical test in non-infectious and infectious diseases (urea, creatinine, total protein, protein fractions, total cholesterol, HDL, LDL, VLDL (very-low density lipoproteins), triglycerides, uric acid, total bilirubin and its fractions, AST, ALT, alkaline phosphatase, GGT (gamma-glutamate transferase), blood amylase, potassium, sodium, calcium, phosphorus, chlorine, C-reactive protein, procalcitonin)
 - 3. Glomerular filtration rates (CKD-EPI)
 - 4. Fasting glycemia, carbohydrate tolerance test, glycated hemoglobin.
 - 5. Hormonal tests (T3, T4, TSH (thyroid-stimulating hormone), cortisol)
 - 6. Urine diastases, urine sugar and acetone tests.
 - 7. Immune status tests (immunoglobulins, rheumatoid factor, A-CCP, Antistreptolysin-O, antinuclear factor, DNA-antibodies, cardiolipin antibodies, lupus anticoagulant, antimitochondrial antibodies, ANCA, aScl 70, LE-cells).
 - 8. Blood Ph test
 - 9. Viral hepatitis A, B, C markers
 - 10. Immune status tests in various forms of infectious diseases
 - 11. Serum markers tests for rubella, HIV, (cytomegalovirus) CMV-infection, toxoplasmosis etc.
 - 12. Mantoux test, Diaskin test
 - 13. Coagulogram
 - 14. Urine, sputum, blood tests for flora and antibiotic sensitivity
 - 15. Helicobacter pylori tests (urease test, breath test, microscopy and bacterioscopy, EIA (enzyme immunoassay), fecal PCR)
- Instrumental research methods results assessment:
 - 1. Abdominal and pelvic US-scan
 - 2. Cardiac Echo
 - 3. Chest, abdominal, bones and joints X-ray examination

- 4. ECG (standard and with bicycle ergometer), daily ECG and AT (arterial tension) monitor
- 5. Bronchoscopy, bronchograpy
- 6. Upper gastrointestinal endoscopy, gastric Ph-test
- 7. Lumbar, pleural, sternal puncture
- Justification of the clinical diagnosis

Calculation of medical and statistical indicators

Methodology for calculation and assessment:

- Population statistics indicators
- General medical and demographic indicators
- Special medical and demographic indicators
- Morbidity indicators based on visits
- Morbidity indicators based on medical examinations
- Hospitalized morbidity indicators
- Morbidity indicators with temporary disability
- Population disability indicators
- Indicators of population provision with medical care
- Indicators characterizing the personnel of medical organizations
- Indicators of the volume of outpatient care
- Indicators of the use of hospital beds
 - Indicators of the workload of medical personnel
 - Indicators of preventive work of medical organizations
 - Indicators of the quality of medical care
 - Indicator "quality level"
 - Integral efficiency coefficient

Presentation of numerical information in the form of tables Presentation of numerical information in the form of diagrams

Registration of medical documentation

- Outpatient coupon patient
- Referral for hospitalization, examination, consultation
- Certificate from the medical commission
- Emergency notification of an infectious disease
- Control card for dispensary observation
- Certificate for obtaining a voucher for spa treatment
- Spa card
- Certificate of incapacity for work
- Certificate of temporary incapacity for work of a student, pupil
- Card of a person discharged from hospital

Conflict resolution skills

Stages Assessment Criteria of the "General Medicine" State Exam

1. Exam Testing

There are 10 variants of testing for the State exam. Each variant consists of 100 questions. Students are supposed to choose one of the suggested answers.

The results of the exam testing are evaluated as follows:

70% and more answers are correct – pass;

less than 70% answers are correct – fail.

2. Practical Training

Consists of two parts:

- 1. Examining a patient. It's carried out at the University's clinical bases; the implementation of the examination algorithm of patients with different pathologies is evaluated. The maximum score is 100 points, the stage is considered completed with a score of 70 points or higher.
- 2. Practical skills. The performance of general medical skills, algorithms for emergency care, skills for calculating statistical indicators, registration of medical documentation, and conflict resolution is evaluated. The stage is held in the conditions of the center for continuous practical training of students. The maximum score is 100 points, the stage is considered completed with a score of 70 points or higher.

The final grade "completed" for "Practical Training" stage is given upon 70 points or higher for **each** part. With a score below 70 points for one of the parts, the "Practical training" stage is considered unfulfilled.

3. Final Interview

The final interview is conducted on 3 situational interdisciplinary tasks from various sections of professional cycle disciplines – therapy, therapeutic profile disciplines, surgical profile disciplines. For each task, the student's answer completeness is evaluated – incomplete, complete, exhaustive – and graded in five-point scale.

The final grade is counted as an arithmetic mean of the grades received. The "excellent", "good" and "satisfactory" grades mean that the exam stage is passed.

With the results of passing these three stages, the final exam grade is given be the Examination Board.

The "excellent", "good" and "satisfactory" grades mean that the state exam is successfully passed.

The List of Recommended Literature for the "General Medicine" State Exam

1. Bryant J. A. Introduction to Bioethics (Введение в биоэтику)/ J. A. Bryant, L. La Velle. – 2th. ed. – West Sussex, UK: Wiley-Blackwell, 2019. – 338 p.

2. Khrustalev, Yu. M. Bioethics. Philosophy of preservation of life and preservation of health (Биоэтика. Философия сохранения жизни и сохранения здоровья): textbook / Yu. M. Khrustalev. – Москва: ГЭОТАР-Медиа, 2022. – 328 с.

3. The Oxford Handbook of the History of Medicine (Оксфордское руководство по истории медицины) / ed. by M. Jackson. – Oxford: Oxford University Press, 2013. – 672 р.

4. Lisitsyn, Yu. P. History of Medicine (История медицины): textbook / Yu. P. Lisitsyn. – Москва: ГЭОТАР-Медиа, 2020. – 352 с.

5. Bennet R. R. Medical and pharmaceutical Latin (Медицинская и фармацевтическая латынь): for students of medicine and pharmacy: a guide to the grammatical construction and translation of physicians' prescriptions, including extensive vocabularies and an appendix upon foreign prescriptions / R. R. Bennett. – Репр. воспроизведение изд. 1914 г. – [S. l.: s. n.], [2019]. – 443 p.

6. Griffin R. M. Cambridge Latin Grammar (Кембридж. Латинская грамматика)/ R. M. Griffin. – Cambridge: Cambridge University Press, unn. – 127 p.

7. Petrova, G. Vs. Latin medical terminology (Латинская медицинская терминология): textbook / G. Vs. Petrova. – Москва: ГЭОТАР-Медиа, 2023. – 488 с.

8. Law Science. (Наука о праве) – Москва: ГЭОТАР-Медиа, 2021. – 528 с.

9. The Psychology Book (Книга по психологии) / comp. C. Collin [et al.]. – London [et al.]: Dorling Kindersley Limited, 2012. – 352 p.

10. Линник, Л. А. Русский язык как иностранный для студентов-медиков = Russian as a Foreign Language for Medical Students: учебное пособие / Линник Л. А., Петросян М. М., Леонова А. С. – Москва: ГЭОТАР-Медиа, 2021. – 160 с.

11. Kenny A. A New History of Western Philosophy (Новая история западной философии): in Four Parts / A. Kenny. – Oxford: Clarendon Press, 2010. – 1058 p.

12. Philosophy (Философия): manual / К. А. Temirgaliev, М. Ү. Temirbekova – Москва: Литтерра, 2016. – 128 с.

13. Dasgupta P. Economics: a Very Short Introduction (Экономика. Очень краткое введение) / P. Dasgupta. – Oxford: Oxford University Press, 2007. – 172 р.

14. Textbook of Human Anatomy = Анатомия человека: учебник на английском языке: [гриф]: in 3 vol. / L. L. Kolesnikov [et al.]. – М.: GEOTAR-Media, 2018. Vol. 1: Locomotor apparatus (Опорно-двигательный аппарат) / L. L. Kolesnikov [et al.] – 2018. – 285 р. Vol. 2: Splanchnology and cardiovascular system. (Спланхнология и кардиоваскулярная система) – 2018. – 329 р. Vol. 3: Nervous system. Esthesiology (Нервная система. Эстезиология). – 2018. – 213 р.

15. Anatomy of bone system: the manual for medical students = Анатомия костной системы: учебное пособие для медицинских вузов (специальность "Лечебное дело") / I. V. Gaivoronskiy [et al.]. – СПб.: СпецЛит, 2014. – 88 р.

16. Angiology: the manual for medical students = Ангиология: учебное пособие для медицинских вузов (специальность "Лечебное дело") (Данное пособие является английской версией учебника профессора И.В. Гайворонского «Нормальная анатомия человека») / I. V. Gaivoronskiy [и др.]. – СПб.: СпецЛит, 2015. – 117 р.

17. Arthrosyndesmology: the manual for medical students = Артросиндесмология: учебное пособие для медицинских вузов (специальность "Лечебное дело") / І. V. Gaivoronskiy [и др.]. – СПб.: СпецЛит, 2015. – 62 р.

18. Central nervous system: the manual for medical students = Центральная нервная система: учебное пособие для медицинских вузов (специальность "Лечебное дело") (Данное пособие является английской версией учебника профессора И.В. Гайворонского «Нормальная анатомия человека») / І. V. Gaivoronskiy [и др.]. – СПб.: СпецЛит, 2015. – 148 р.

19. Digestive system: the manual for medical students = Пищеварительная система: учебное пособие для медицинских вузов (специальность "Лечебное дело") (Данное пособие является английской версией учебника профессора И.В. Гайворонского «Нормальная анатомия человека») / І. V. Gaivoronskiy [и др.]. – СПб.: СпецЛит, 2015. – 95 р.

20. Myology: the manual for medical students = Миология: учебное пособие для медицинских вузов (специальность "Лечебное дело") (Данное пособие является английской версией учебника профессора И.В. Гайворонского «Нормальная анатомия человека») / I. V. Gaivoronskiy [et al.]. – СПб.: СпецЛит, 2016. – 112 р.

21. Peripheral nervous system. Autonomic nervous system. Sense organs: the manual for medical students = Периферическая нервная система. Автономная нервная система. Органы чувств: учебное пособие для медицинских вузов (специальность "Лечебное дело") (Данное пособие является английской версией учебника профессора И.В. Гайворонского «Нормальная анатомия человека») / І. V. Gaivoronskiy [и др.]. – СПб.: СпецЛит, 2015. – 109 р.

22. Respiratory system. Heart. Endocrine system: the manual for medical students = Дыхательная система. Сердце. Эндокринная система: учебное пособие для медицинских вузов (специальность "Лечебное дело") (Данное пособие является английской версией учебника профессора И.В. Гайворонского «Нормальная анатомия человека») / I. V. Gaivoronskiy [и др.]. – СПб.: СпецЛит, 2015.

23. Splanchnology: the manual for medical students = Спланхнология: рабочая тетрадь для медицинских вузов специальность "Лечебное дело" (Данное пособие является английской версией учебника профессора И.В. Гайворонского «Нормальная анатомия человека») / І. V. Gaivoronskiy [и др.]. – СПб.: СпецЛит, 2015. – 79 р.

24. Urogenital system: the manual for medical students = Мочеполовая система: учебное пособие для медицинских вузов (специальность "Лечебное дело") (Данное пособие является английской версией учебника профессора И.В. Гайворонского «Нормальная анатомия человека») / I. V. Gaivoronskiy [и др.]. – СПб.: СпецЛит, 2015. – 71 р.

25. Fullick A. A Level Biology A for OCR: year 1 and AS / A. Fullick, J. Locke, P. Bircher; ed. A. Fullick. – [S. 1.]: Oxford University Press, 2015. – 384 p.

26. Fisher M. A Level Advancing Biology B for OCR: year 2 / M. Fisher, J. W. Warren, D. Parker; ed. F. Fuller. – Oxford: Oxford University Press, 2015. – 292 p.

27. Essential Medical Biology (Основы медицинской биологии): [textbook] / Ministry of Health, I.M. Sechenov First Moscow State Medical University (Sechenov University); ed. by N. V. Chebyshev. – Moscow: Medical Informational Agency, 2020. Vol. 1: Cell Biology (Биология клетки): учебник для использования в образовательных учреждениях, реализующих основные профессиональные образовательные программы высшего

образования уровня специалитета по направлениям подготовки, содержащим дисциплину "Биология" на английском языке: [гриф] / N. V. Chebyshev, I. A. Berechikidze, S. M. Kuzin [et al.]. – 2020. Vol. 2: Genetics (Генетика): учебник для использования в образовательных учреждениях, реализующих основные профессиональные образовательные программы высшего образования уровня специалитета по направлениям подготовки, содержащим дисциплину "Биология" на английском языке: [гриф] / N. V. Chebyshev, S. N. Larina, E. S. Gorozhanina [et al.]; ed. by N. V. Chebyshev. – 2020. Vol. 3: Human Parasitology (Паразитология человека): учебник для использования в образовательных учреждениях, реализующих основные профессиональные образовательных учреждениях, реализующих основные профессиональные образовательные программы высшего образования уровня специалитета по направлениям подготовки, содержащим дисциплину "Биология" на английском языке: [гриф] / N. V. Chebyshev, I. A. Berechikidze, G. G. Grineva [et al.]; ed. by N. V. Chebyshev. – 2020.

28. Zurabyan, S. E. Fundamentals of bioorganic chemistry: textbook for medical students = Основы биоорганической химии: учебник для студентов учреждений высшего профессионального образования, обучающихся по специальностям 31.05.01 (060101.65) "Лечебное дело", 31.05.02 (060103.65) "Педиатрия", 32.05.01 (060105.65) "Медико-профилактическое дело", 31.05.03 (060201.65) "Стоматология" по дисциплине "Химия общая и биоорганическая" / S. E. Zurabyan. – М.: GEOTAR-Media, 2019. – англ.

29. Zurabyan, S. E. Fundamentals of bioorganic chemistry: textbook for medical students = Основы биоорганической химии: учебник / S. E. Zurabyan. – M.: GEOTAR-Media, 2018.

30. Medical biochemistry = Медицинская биохимия: [учебник для медицинских вузов] / V. V. Davydov [et al.]. – Saint-Petersburg: Эко-Вектор, 2018. – 391 р.

31. Baigildina, A. A. Laboratory Manual on Biological Chemistry (Лабораторное пособие по биологической химии): for foreign students of Medical Department of Higher Education Institutions: tutorial / Baigildina A. A., Davydov V. V. – Москва: ГЭОТАР-Медиа, 2019. - 304 с.

32. Glukhov, A. I. Biochemistry with exercises and tasks (Биохимия с упражнениями и заданиями): textbook / ed. by A. I. Glukhov, V. V. Garin. – Moscow: GEOTAR-Media, 2022. – 296 с.

33. Glukhov, A. I. Essential Biochemistry for Medical Students with Problem-Solving Exercises (Основы биохимии для студентов-медиков с упражнениями по решению проблем) / ed. by Glukhov A. I., Gubareva A. E. – Москва: ГЭОТАР-Медиа, 2020. – 584 с.

34. Danilov R.K. Histology, Embryology, Cytology: textbook = Гистология, эмбриология, цитология: учебник: для использования в образовательном процессе образовательных организаций, реализующих программы высшего образования по специальностям 31.05.01 "Лечебное дело", 31.05.02 "Педиатрия", 31.05.03 "Стоматология", 32.05.01 "Медико-профилактическое дело": [гриф] / R. K. Danilov, T. G. Borovaya. – Moscow: GEOTAR-Media, 2022.

35. Ross M. H. Histology (Гистология): a Text and Atlas: With Correlated Cell and Molecular Biology / M. H. Ross, W. Pawlina. – 7th. ed., International ed. – Philadelphia [et al.]: Wolters Kluwer Health, 2016. – 984 p.

36. Колесников, Л. Л. Terminologia Embryologica. Международные термины по эмбриологии человека с официальным списком русских эквивалентов / Колесников Л. Л., Шевлюк Н. Н., Ерофеева Л. М. – Москва: ГЭОТАР-Медиа, 2014. – 422 с.

37. Histology, Embryology, Cytology (Гистология, эмбриология, цитология) / ed. by Yu.I. Afanasyev, N.A. Yurina. – Москва: ГЭОТАР-Медиа, 2022. – 768 с.

38. Zverev, V. V. Medical Microbiology, Virology, Immunology (Медицинская микробиология, вирусология, иммунология): textbook: in 2 volumes. / eds. V. V. Zverev, M. N. Boichenko. – Москва: ГЭОТАР-Медиа, 2020.

39. Khaitov R. M. Immunology (Иммунология): textbook for medical schools/universities: in english / R. M. Khaitov. - 2th. ed., updated. – M.: GEOTAR-Media, 2019. – 263 p.

40. Omelchenko, V. P. Medical informatics: textbook = Медицинская информатика: учебник / V. P. Omelchenko, A. A. Demidova. – Moscow: GEOTAR-Media, 2020

41. Guide to Medical Informatics for Foreign Students (Руководство по медицинской информатике для иностранных студентов). – Москва: ГЭОТАР-Медиа, 2022. – 272 с.

42. Remizov, A. N. Medical and biological physics (Медицинская и биологическая физика): textbook / A. N. Remizov. – Moscow: GEOTAR-Media, 2022. – 576 с.

43. Medical Microbiology. A guide to microbial infections: pathogenesis, immunity, laboratory investigation and control (Медицинская микробиология. Путеводитель по микробным инфекциям: патогенез, иммунитет, лабораторная диагностика и контроль) / ed. by M. R. Barer [et al.]. – 19th. ed., International ed. – [S. l.]: Elsevier Ltd., 2019. - 743 p.

44. Medical microbiology, Virology, Immunology (Медицинская микробиология, вирусология, иммунология): textbook: in 2 volumes = Медицинская микробиология, вирусология, иммунология: учебник: в 2 т. / V. V. Zverev, M. N. Boichenko, A. S. Bykov [и др.]; ed. by V. V. Zverev, M. N. Boichenko. – Moscow: GEOTAR-Media, 2020

45. Artamonova, M. N. Medical Microbiology, Virology and Immunology. Lecture Note (Медицинская микробиология, вирусология и иммунология. Конспект лекций): textbook / M. N. Artamonova, N. I. Potaturkina-Nesterova, N. A. Ilyina, I. S. Nemova. – Москва: ГЭОТАР-Медиа, 2021. – 352 с.

46. Medical Physiology (Медицинская физиология) / P. S. Aronson [et al.]; ed. by W. F. Boron, E. L. Boulpaep. – 3th. ed., International ed. – Philadelphia: Elsevier, 2017.

47. Normal physiology (Нормальная физиология): textbook for students' independent work: [гриф] / Ye. V. Dorokhov, A. V. Karpova, V. A. Semiletova [et al.]; М-во науки и высш. образования РФ. – Moscow: GEOTAR-Media, 2021.

48. Normal physiology (Нормальная физиология): textbook / ed. K. V. Sudakov. – Москва: ГЭОТАР-Медиа, 2022. – 728 с.

49. Лапкин, М. М. Избранные лекции по нормальной физиологии = Selected Lectures on Normal Physiology: учебное пособие на русском и английском языках / М. М. Лапкин, Е. А. Трутнева. – Москва: ГЭОТАР-Медиа, 2021. – 544 с.

50. Nikolaev, A.V. Topographic Anatomy and Operative Surgery (Топографическая анатомия и оперативная хирургия): textbook = Топографическая анатомия и оперативная хирургия: учебник : [гриф] / А. V. Nikolaev; М-во образования и науки РФ. – Moscow: GEOTAR-Media, 2019.

51. Dydykin, S. S. Topographic Anatomy and Operative Surgery. Workbook. In 2 parts (Топографическая анатомия и оперативная хирургия. / Edited by S. S. Dydykin. – Москва: ГЭОТАР-Медиа, Part I. - 2022. - 120 с. Part II. - 2022. - 120 с.

52. Operative surgery and topographic anatomy. Practical surgical skills for students of years II-IV of medical universities and faculties program: in 2 parts (Оперативная хирургия и топографическая анатомия. Практические навыки хирургии для студентов II-IV курсов

программы медицинских вузов и факультетов). / edited by S. S. Dydykin. – Москва: ГЭОТАР-Медиа, 2023. Part I. Surgical instruments (Хирургические инструменты): tutorial guide. – 64 с. Part II. Main elements of operational technique (Основные элементы оперативной техники): tutorial guide. – 56 с.

53. Pathological anatomy (Патологическая анатомия): textbook / ed.by V.S. Paukov. – Moscow: GEOTAR-Media, 2022.

54. Tsyplakov, D. E. Macro- and microscopic diagnosis in practical classes in pathological anatomy. Atlas (Макро- и микроскопическая диагностика на практических занятиях по патологической анатомии. Атлас): tutorial guide / D. E. Tsyplakov, A. Z. Shakirova, E. V. Silina. – Москва: ГЭОТАР-Медиа, 2023. – 208 с.

55. Litvitsky P. F. Pathophysiology: concise lectures, tests, clinico-pathophysiological situations and clinico-laboratory cases = Патофизиология: лекции, тесты, задачи: учебное пособие: [гриф] / P. F. Litvitsky, S. V. Pirozhkov, T. V. Tezikov. – M.: GEOTAR-Media, 2016. – 432 с.

56. Litvitsky P. F. Clinical pathophysiology: concise lectures, tests, cases = Клиническая патофизиология: курс лекций, тесты, задачи: учебное пособие для студентов учреждений высшего образования / П. Ф. Литвицкий, С. В. Пирожков, Е. Б. Тезиков. – 3-е изд., перераб. и доп. – Москва: ГЭОТАР-Медиа, 2021. - 432 с.

57. Alyautdin, R. N. Pharmacology. Illustrated textbook / ed. R. N. Alyautdin. – Москва: ГЭОТАР-Медиа, 2020. – 312 с.

58. Kharkevitch D. A. Pharmacology (Фармакология): textbook for medical students: [гриф] / D. A. Kharkevitch; М-во образования и науки РФ. - 2th. ed., translation of 12th edition of Russian textbook "Pharmacology" (2017). – М.: ГЭОТАР-Медиа, 2019. – 676 р.

59. General principles of prescribing drugs: students' tutorial = Общие принципы назначения лекарственных средств: учебное пособие для студентов: [гриф] / Ивановская государственная медицинская академия, Кафедра фармакологии; составители: Т. Р. Гришина [и др.]; рецензент М. Е. Клюева. – Иваново: ИвГМА, 2021.

60. Antibiotics (Антибиотики): students' tutorial / Т. Р. Гришина, О. А. Громова, А. Г. Калачева [и др.]; Ивановская государственная медицинская академия, Кафедра фармакологии. – Ivanovo: IvSMA, 2022.

61. Giancoli D. C. Physics: principles with Applications (Физика: основы и их применение) / D. C. Giancoli. – 7th. ed., Global Ed. – Boston [et al.]: Pearson Education Limited, 2016. – 1059 p.

62. Remizov, A. N. Medical and biological physics: textbook (Медицинская и биологическая физика) / A. N. Remizov. – Moscow: GEOTAR-Media, 2022. – 576 с.

63. Pavlushkov, I. V. Mathematics (Математика) / I. V. Pavlushkov, L. V. Rozovsky, I. A. Narkyevich. – Москва: ГЭОТАР-Медиа, 2021. – 320 с.

64. Bylikin S. Yu. General and bioorganic chemistry: workbook for foreign students = Общая и биоорганическая химия: учебное пособие для иностранных студентов / S. Yu. Bylikin. – Moscow: Medical informational agency, 2009. - 111 p.

65. Chemistry: Medical aspects (Химия: Медицинские аспекты): tutorial guide. – Москва: ГЭОТАР-Медиа, 2022. – 144 с.

66. Туиkavkin, N. A. Organic chemistry (Органическая химия): textbook / Tyukavkin N. A. – Москва: ГЭОТАР-Медиа, 2022. – 592 с.

67. Kharitonov, Yu. Ya. Analytical Chemistry (Аналитическая химия.). – Москва: ГЭОТАР-Медиа, 2021. – Analytics 1. General Theoretical Foundations. Qualitative Analysis

(Аналитика 1. Общетеоретические основы. Качественный анализ) / ed. Grigorieva V. Yu. – 608 c. Analytics 2. Quantitative analysis. Physical-chemical (instrumental) analysis methods (Аналитика 2. Количественный анализ. Физико-химические (инструментальные) методы анализа) / Kharitonov Yu. Ya. – 592 c.

68. Obstetrics and Gynecology: textbook: in 4 volumes = Акушерство и гинекология: учебник: для использования в образовательных учреждениях, реализующих основные профессиональные образовательные программы высшего образования по направлению подготовки специалитета по специальности 31.05.01 "Лечебное дело": [гриф]. – Moscow: GEOTAR-Media, 2021

69. Obstetrics and Gynecology: textbook: in 4 volumes = Акушерство и гинекология: учебник: для использования в образовательных учреждениях, реализующих основные профессиональные образовательные программы высшего образования по направлению подготовки специалитета по специальности 31.05.01 "Лечебное дело": [гриф]. – Moscow: GEOTAR-Media, 2021. Vol. 2: Obstetric pathology = Патологическое акушерство / I. S. Sidorova, N. A. Nikitina. – 2021.

70. Obstetrics and Gynecology: textbook: in 4 volumes = Акушерство и гинекология: учебник: для использования в образовательных учреждениях, реализующих основные профессиональные образовательные программы высшего образования по направлению подготовки специалитета по специальности 31.05.01 "Лечебное дело": [гриф]. – Moscow: GEOTAR-Media, 2021. Vol. 3: Operative obstetrics = Оперативное акушерство / I. S. Sidorova, N. A. Nikitina. – 2021.

71. Obstetrics and Gynecology: textbook: in 4 volumes = Акушерство и гинекология: учебник: для использования в образовательных учреждениях, реализующих основные профессиональные образовательные программы высшего образования по направлению подготовки специалитета по специальности 31.05.01 "Лечебное дело": [гриф]. – Moscow: GEOTAR-Media, 2021. Vol. 4: Gynecology = Гинекология / I. S. Sidorova, A. L. Unanyan, N. A. Nikitina. – 2021.

72. Radzinskiy, V. E. Gynecology (Гинекология): textbook / ed. by V. E. Radzinskiy, A. M. Fuks. – Москва: ГЭОТАР-Медиа, 2020. – 896 с.

73. Obstetrics: textbook = Акушерство: учебник: [гриф] / А. Abramov [et al.]; ed. by V. E. Radzinskiy, A. M. Fuks, Ch. G. Gagaev; М-во образования и науки РФ, Рос. ун-т дружбы народов. – М.: GEOTAR-Media, 2019.

74. Strizhakov, A. N. Methodology and methods of educational obstetric history taking: tutorial guide (Методика и методика сбора акушерского анамнеза) / A. N. Strizhakov, I. V. Ignatko, A. M. Rodionova [et al.]. – Москва: ГЭОТАР-Медиа, 2022. – 80 с.

75. Кира, Ε. Φ. The basic questions of oncogynecology Основные вопросы онкогинекологии: учебник на английском и русском языках / Кира Е. Φ. [и др.]. – Москва: ГЭОТАР-Медиа, 2018. – 288 с.

76. Levchuk I. P. First Aid in Case of Accidents and Emergency Situations: course book = Первая помощь при несчастных случаях и чрезвычайных ситуациях: курс лекций / І. Р. Levchuk, M. V. Kostyuchenko, A. P. Nazarov. – М.: GEOTAR-Media, 2017. – 116 р.

77. Levchuk I.P. Life Safety in Medicine: textbook = Безопасность жизнедеятельности: учебное пособие: в образовательных организациях, реализующих образовательные программы по специальностям высшего профессионального образования укрупненной группы специальностей "Здравоохранение и медицинские науки": [гриф] / I. P. Levchuk, A. P. Nazarov, M. V. Kostyuchenko. – Moscow: GEOTAR-Media, 2020.

78. Levchuk, I. P. First aid in case of accidents and disasters (Первая помощь при авариях и катастрофах)/ І. Р. Levchuk, М. V. Kostyuchenko. – Москва: ГЭОТАР-Медиа, 2023. – 128 с.

79. Левчук, И. П. Disaster Medicine = Медицина катастроф: учебник на английском и русском языках / И. П. Левчук, А. П. Назаров, Ю. А. Назарова. – Москва: ГЭОТАР-Медиа, 2021. – 240 с.

80. Garkavi, A. V. Disaster medicine (Медицина катастроф)/ A. V. Garkavi, G. M. Kavalersky. – Москва: ГЭОТАР-Медиа, 2019. – 304 с.

81. Pivovarof Y. P. Short textbook of: Hygiene and ecology (Гигиена и экология): for students using English as a mediator language: [гриф] / Y. P. Pivovarof, A. A. Al Sabounchi; Pirogov Russian National Research Medical University, Department of hygiene. – 5th. ed. – M.: IKAR Publisher, 2015. – 546 p.

Shashina E.A. Educational and methodological textbook for practical classes on 82. hygiene: tutorial = Учебно-методическое пособие для занятий по гигиене: учебное пособие учреждениях, использования В образовательных реализующих основные для программы образования уровня профессиональные высшего специалитета по направлениям подготовки 31.05.01 "Лечебное дело", 33.05.01 "Фармация", 31.05.03 "Стоматология": [гриф] / E. A. Shashina, V. V. Makarova. – Moscow: GEOTAR-Media, 2020.

83. Melnichenko, P. I. Hygiene (Гигиена): textbook / ed. P. I. Melnichenko. – Москва: ГЭОТАР-Медиа, 2023. – 512 с.

84. Internal Diseases: textbook: in 2 volumes = Внутренние болезни: учебник: для использования В образовательных учреждениях, реализующих основные профессиональные образовательные программы высшего образования уровня по направлениям подготовки 31.05.01 "Лечебное дело", 31.05.02 специалитета "Медико-профилактическое дело", 30.05.02 "Педиатрия", 32.05.01 "Медицинская биофизика", 30.05.01 "Медицинская биохимия": в 2 т.: [гриф] / ed. by A. I. Martynov [et al.]. – Moscow: GEOTAR-Media, 2022

Internal Diseases: textbook: in 2 volumes = Внутренние болезни: учебник: для 85. использования В образовательных учреждениях, реализующих основные профессиональные образовательные программы высшего образования уровня специалитета по направлениям подготовки 31.05.01 "Лечебное дело", 31.05.02 "Педиатрия", "Медико-профилактическое дело", 30.05.02 "Медицинская 32.05.01 биофизика", 30.05.01 "Медицинская биохимия": в 2 т.: [гриф] / ed. by A. I. Martynov [et al.]. - Moscow: GEOTAR-Media, 2022.

86. Surgical diseases: textbook = Хирургические болезни: учебник: in 2 volumes: [гриф] / N. V. Merzlikin, N. A. Brazhnikova, B. I. Alperovich, V. F. Tskhai. – Moscow: GEOTAR-Media, 2021.

87. Chebotarev V.V. Dermatovenerology: textbook = Дерматовенерология: учебник / V. V. Chebotarev, M. S. Askhakov. – Moscow: GEOTAR-Media, 2020.

88. Infectious diseases: textbook = Инфекционные болезни: учебник / G. K. Alikeeva, Yu. Ya. Vengerov, I. V. Gagarina [и др.]; ed. by N. D. Yushchuk, Yu. Ya. Vengerov. – Moscow : GEOTAR-Media, 2020.

89. Dudnik O. V. Diagnostic algorithms major infectious diseases = Диагностические алгоритмы основных инфекционных болезней: textbook for foreign students of the 5th year studying in English on the cycle "Infectious diseases": [in 3 parts] / Ivanovo State Medical

Academy, Department of Infectious Diseases and and dermatovenereology. – Ivanovo: IvSMA, 2022. Pt. 1: Intestinal infections. Helminthiases / O. V. Dudnik, S. N. Orlova.

90. Dudnik O. V. Diagnostic algorithms major infectious diseases = Диагностические алгоритмы основных инфекционных болезней: textbook for foreign students of the 5th year studying in English on the cycle "Infectious diseases": [in 3 parts] / Ivanovo State Medical Academy, Department of Infectious Diseases and and dermatovenereology. – Ivanovo: IvSMA, 2022. Pt. 2: Viral hepatitis. HIV infection / O. V. Dudnik, S. N. Orlova.

91. Dudnik O. V. Diagnostic algorithms major infectious diseases = Диагностические алгоритмы основных инфекционных болезней: textbook for foreign students of the 5th year studying in English on the cycle "Infectious diseases": [in 3 parts] / Ivanovo State Medical Academy, Department of Infectious Diseases and and dermatovenereology. – Ivanovo: IvSMA, 2022. Pt. 3: Diseases with an airborne mechanism of pathogen transmission / O. V. Dudnik, S. N. Orlova, N. N. Fedotova.

92. Dudnik O. V. Diagnostic algorithms major infectious diseases = Диагностические алгоритмы основных инфекционных болезней: textbook for foreign students of the 5th year studying in English on the cycle "Infectious diseases": [in 5 parts] / Ivanovo State Medical Academy, Department of Infectious Diseases and and dermatovenereology. – Ivanovo: IvSMA, 2022 – 2023. Pt. 4: Natural focal diseases / O. V. Dudnik, S. N. Orlova, N. N. Fedotova.

93. Dudnik O. V. Diagnostic algorithms major infectious diseases = Диагностические алгоритмы основных инфекционных болезней: textbook for foreign students of the 5th year studying in English on the cycle "Infectious diseases": [in 5 parts] / Ivanovo State Medical Academy, Department of Infectious Diseases and and dermatovenereology. – Ivanovo: IvSMA, 2022 – 2023. Pt. 5: Differential diagnosis of major infectious diseases / O. V. Dudnik, S. N. Orlova, E. P. Kalistratova.

94. Trufanov, G. E. Diagnostic radiology (Диагностическая радиология): textbook / G. E. Trufanov, R. M. Akiev, K. N. Alekseev [et al.]; ed. G. E. Trufanov. – Москва: ГЭОТАР-Медиа, 2021. – 444 с.

95. Levchuk I. P. First Aid in Case of Accidents and Emergency Situations: course book = Первая помощь при несчастных случаях и чрезвычайных ситуациях: курс лекций / I. P. Levchuk, M. V. Kostyuchenko, A. P. Nazarov. – М.: GEOTAR-Media, 2017. – 116 p.

96. Levchuk, I. P. First aid in case of accidents and disasters (Первая помощь при авариях и катастрофах) / I. P. Levchuk, M. V. Kostyuchenko. – Москва: ГЭОТАР-Медиа, 2023. – 128 с.

97. Левчук, И. П. Disaster Medicine = Медицина катастроф: учебник на английском и русском языках / И. П. Левчук, А. П. Назаров, Ю. А. Назарова. – Москва: ГЭОТАР-Медиа, 2021. – 240 с.

98. Garkavi, A. V. Disaster medicine (Медицина катастроф)/ A. V. Garkavi, G. M. Kavalersky. – Москва: ГЭОТАР-Медиа, 2019. – 304 с.

99. Bochkov N. P. Clinical genetics: textbook = Клиническая генетика: учебник для студентов учреждений высшего профессионального образования, обучающихся по специальностям 31.05.01 (060101.65) "Лечебное дело", 31.05.02 (060103.65) "Педиатрия", 32.05.01 (060105.65) "Медико-профилактическое дело" по дисциплине "Медицинская генетика": [гриф] / N. P. Bochkov, V. P. Puzyrev, S. A. Smirnikhina; ed. by N. P. Bochkov. – Moscow: GEOTAR-Media, 2023. – 499 p.

100. Medical rehabilitation (Медицинская реабилитация): textbook / ed. by A.V. Epifanov, E.E. Achkasov, V.A. Epifanov. – Moscow: GEOTAR-Media, 2022.

101. Epifanov V. A. Physical therapy: tutorial guide = Лечебная физическая культура: учебное пособие / V. A. Epifanov, A.V. Epifanov. – Moscow: GEOTAR-Media, 2020. – 568 р.

102. Карпов С.М. Топическая диагностика заболеваний нервной системы: учебник: для использования в образовательном процессе образовательных организаций, реализующих программы высшего образования по специальностям 31.05.01 "Лечебное дело", 31.05.02 "Педиатрия", 31.05.03 "Стоматология" [на английском и русском языках]: [гриф] = Topical diagnosis of diseases of the nervous system : textbook / С. М. Карпов, И. Н. Долгова; М-во образования и науки РФ. – Москва: ГЭОТАР-Медиа, 2018.

103. Gusev, E.I. Neurology and neurosurgery: textbook: in 2 volumes = Неврология и нейрохирургия: учебник для студентов учреждений высшего профессионального образования, обучающихся по специальности 31.05.01 "Лечебное дело" по дисциплине "Неврология, медицинская генетика и нейрохирургия": [гриф] / Е. I. Gusev, A. N. Konovalov, V. I. Skvortsova. – Moscow: GEOTAR-Media, 2023. Vol. 1: Neurology = Неврология. – 2023. – 556 р. Vol. 2: Neurosurgery = Нейрохирургия / ed. by A. N. Konovalov, A. V. Kozlov. – 2023. – 315 р.

104. Garanina E. S. Neurological Pathology. Principles of diagnosis and treatment = Неврологическая патология. Принципы диагностики и лечения: educational electronic guide for foreign students studying at the faculty of "General Medicine": [in 4 parts] / E. S. Garanina, V. V. Linkov, M. U. Polushenkova; reviewer A. E. Novikov; Ivanovo State Medical Academy. – Ivanovo: IvSMA, 2021 – 2022. Pt. 1: Neurosurgical Pathology. – 2021.

105. Garanina E. S. Neurological Pathology. Principles of diagnosis and treatment = Неврологическая патология. Принципы диагностики и лечения: educational electronic guide for foreign students studying at the faculty of "General Medicine": [in 4 parts] / E. S. Garanina, V. V. Linkov, M. U. Polushenkova; reviewer A. E. Novikov; Ivanovo State Medical Academy. – Ivanovo: IvSMA, 2021 – 2022. Pt. 2: Parkinson's disease and parkinsonism, cerebral palsy, ischemic stroke. – 2021.

106. Garanina E. S. Neurological Pathology. Principles of diagnosis and treatment = Неврологическая патология. Принципы диагностики и лечения: educational electronic guide for foreign students studying at the faculty of "General Medicine": [in 4 parts] / E. S. Garanina, V. V. Linkov, M. U. Polushenkova; reviewer A. E. Novikov; Ivanovo State Medical Academy. – Ivanovo: IvSMA, 2021 – 2022. Pt. 2: Parkinson's disease and parkinsonism, cerebral palsy, ischemic stroke. – 2021.

107. Garanina E. S. Neurological Pathology. Principles of diagnosis and treatment = Неврологическая патология. Принципы диагностики и лечения: educational electronic guide for foreign students studying at the faculty of "General Medicine": [in 4 parts] / E. S. Garanina, V. V. Linkov, M. U. Polushenkova; reviewer A. E. Novikov; Ivanovo State Medical Academy. – Ivanovo: IvSMA, 2021 – 2022. Pt. 3: Meningitis, multiple sclerosis, epilepsy. – 2021.

108. Garanina E. S. Neurological Pathology. Principles of diagnosis and treatment = Неврологическая патология. Принципы диагностики и лечения: educational electronic guide for foreign students studying at the faculty of "General Medicine": [in 4 parts] / E. S. Garanina, V. V. Linkov, M. U. Polushenkova; reviewer A. E. Novikov; Ivanovo State Medical Academy. – Ivanovo: IvSMA, 2021 – 2022. – Text: electronic. Pt. 4: Diseases of the peripheral nervous system, Myasthenia gravis, Encephalitis, Headache. – 2022.

109. Garanina E. S. Neurological Pathology. Principles of diagnosis and treatment = Неврологическая патология. Принципы диагностики и лечения: educational electronic guide for foreign students studying at the faculty of "General Medicine": [in 6 parts] / E. S. Garanina,

V. V. Linkov, M. U. Polushenkova; reviewer A. E. Novikov; Ivanovo State Medical Academy. – Ivanovo: IvSMA, 2021 – 2023. Pt. 5: Polyneuropathy. Guillain-Barré syndrome. Hemorrhagic stroke (spontaneous subarachnoid hemorrhage). – 2023.

110. Garanina E. S. Neurological Pathology. Principles of diagnosis and treatment = Неврологическая патология. Принципы диагностики и лечения: educational electronic guide for foreign students studying at the faculty of "General Medicine": [in 6 parts] / E. S. Garanina, V. V. Linkov, M. U. Polushenkova; reviewer A. E. Novikov; Ivanovo State Medical Academy. – Ivanovo: IvSMA, 2021 – 2023. Pt. 6: NeuroAIDS, Neurosyphilis, Poliomyelitis, Acute transverse myelitis, Neurological pathology associated with COVID-19. – 2023.

111. Gostishchev, V. K. General surgery: textbook = Общая хирургия: учебник / V. K. Gostishchev. – Moscow: GEOTAR-Media, 2021.

112. Gostishchev, V. K. General surgery: the manual = Руководство к практическим занятиям по общей хирургии (на английском языке): учебное пособие для иностранных студентов медицинских вузов: [гриф] УМО / V. K. Gostishchev. – М.: GEOTAR-Media, 2015.

113. Selected lectures on general surgery in english = Избранные лекции по общей хирургии на английском языке : электронное учебное пособие для иностранных студентов / С. В. Корулин, С. П. Черенков, В. В. Дубравина [и др.]; Ивановская государственная медицинская академия, Кафедра общей хирургии, анестезиологии и реаниматологии. - Иваново: ИвГМА, 2021. Ч. 1 / С. П. Черенков. – 2021.

114. Selected lectures on general surgery in english = Избранные лекции по общей хирургии на английском языке: электронное учебное пособие для иностранных студентов : [в 3 частях] / С. В. Корулин, С. П. Черенков, В. В. Дубравина [и др.]; Ивановская государственная медицинская академия, Кафедра общей хирургии, анестезиологии и реаниматологии. – Иваново: ИвГМА, 2021. Ч.2

115. Selected lectures on general surgery in english = Избранные лекции по общей хирургии на английском языке : электронное учебное пособие для иностранных студентов : [в 3 частях] / С. В. Корулин, С. П. Черенков, В. В. Дубравина [и др.] ; Ивановская государственная медицинская академия, Кафедра общей хирургии, анестезиологии и реаниматологии. – Иваново: ИвГМА, 2021. Ч.3

116. Palchun V.T. Otorhinolaryngology: textbook = Оториноларингология: учебник / V. T. Palchun, A. I. Kryukov, M. M. Magomedov. – Moscow: GEOTAR-Media, 2020.

117. Pediatric diseases: textbook = Детские болезни: учебник: к использованию в образовательных учреждениях, реализующих образовательные программы среднего, высшего, дополнительного профессионального образования по дисциплине "Педиатрия" по специальности "Лечебное дело": [гриф] / R. R. Kildiyarova, M. Y. Denisov, V. I. Makarova [et al.]; ed. by R. R. Kildiyarova. – Moscow: GEOTAR-Media, 2022.

118. Boyd C. Clinical skills for nurses (Клинические навыки для медсестёр) / C. Boyd. - West Sussex, UK: Wiley-Blackwell, 2013. – 212 р. – (Student Survival Skills).

119. Oslopov, V. N. Case history of therapeutic patient (История болезни терапевтического больного): manual / V. N. Oslopov, O. V. Bogoyavlenskaya, Yu. V. Oslopova et al. – Москва: ГЭОТАР-Медиа, 2014. – 176 с.

120. Oslopov V.N. General care of a patient (Общий уход за больными): tutorial: [гриф] / V. N. Oslopov, O. V. Bogoyavlenskaya; М-во науки и высш. образования РФ. – Москва: ГЭОТАР-Медиа, 2019.

121. Care for surgical patients: study guide = Уход за пациентами хирургического профиля: учебно-методическое пособие: [гриф] / А. V. Kruchkova, Yu. V. Kondusova, I. A. Poletayeva [et al.]; ed. by A. V. Kruchkova; М-во образования и науки РФ. – Moscow: GEOTAR-Media, 2020.

122. Косцова, Н. Г. Основы ухода за пациентом в хирургической клинике = Basics of Nursing Care in Surgery: учебное пособие на русском и английском языках / Косцова Н. Г., Бадретдинова А. И., Тигай Ж. Г. [и др.] – Москва: ГЭОТАР-Медиа, 2020. – 312 с.

123. Ушакова, С. Е. Профилактическая работа участкового терапевта в поликлинике : учебное пособие для студентов 5 и 6 курсов лечебного факультета = Preventive work of a district therapist in a polyclinic: textbook for students of the 5 and 6 courses of the Faculty of Medicine / С. Е. Ушакова, А. С. Пайкова, М. В. Александров; рецензент А. В. Бурсиков; Ивановская государственная медицинская академия. – Иваново: ИвГМА, 2023.

124. Outpatient Therapy: textbook (Амбулаторно-поликлиническая терапия) / ed. by V. N. Larina. – Москва: ГЭОТАР-Медиа, 2023. – 456 с.

125. Ivashkin V. T. Internal diseases propedeutics: textbook: for foreign students of Medical Higer Educational Institutions: [гриф УМО] = Пропедевтика внутренних болезней: учебное пособие (на английском языке): для студентов медицинских вузов, обучающихся на английском языке / V. T. Ivashkin, A. V. Okhlobystin. - М.: GEOTAR-Media, 2019. – 176 р.

126. Tsygankov B.D. Psychiatry: textbook = Психиатрия: учебник / B. D. Tsygankov, S. A. Ovsyannikov. – Moscow: GEOTAR-Media, 2020.

127. Oslopov V.N. General care of a patient (Общий уход за больными): tutorial: [гриф] / V. N. Oslopov, O. V. Bogoyavlenskaya; М-во науки и высш. образования РФ. – Москва: ГЭОТАР-Медиа, 2019.

128. Care for surgical patients: study guide = Уход за пациентами хирургического профиля: учебно-методическое пособие: [гриф] / А. V. Kruchkova, Yu. V. Kondusova, I. A. Poletayeva [et al.]; ed. by A. V. Kruchkova; М-во образования и науки РФ. – Moscow: GEOTAR-Media, 2020.

129. Косцова, Н. Г. Основы ухода за пациентом в хирургической клинике = Basics of Nursing Care in Surgery: учебное пособие на русском и английском языках / Косцова Н. Г., Бадретдинова А. И., Тигай Ж. Г. [и др.] – Москва: ГЭОТАР-Медиа, 2020. – 312 с.

130. Sevbitov, A. V. Introduction to Dentistry (Введение в стоматологию) / A. V. Sevbitov. – Москва: ГЭОТАР-Медиа, 2018. – 96 с.

131. Pigolkin Yu.I. Forensic Medicine (Судебная медицина): textbook/ Yu.I. Pigolkin, I.A. Dubrovin. – Москва: ГЭОТАР-Медиа, 2019.

132. Traumatology and Orthopedics (Травматология и ортопедия): textbook / A. V. Garkavi, A. V. Lychagin, G. M. Kavalerskiy [et al.]. – Москва: ГЭОТАР-Медиа, 2023. – 784 с.

133. Komyakov, Boris Kirillovich. Urology: textbook = Урология: учебник: для использования в образовательном процессе образовательных организаций, реализующих программы высшего образования по специальности 31.05.01 "Лечебное дело": [гриф] / В. К. Komyakov. – Moscow: GEOTAR-Media, 2021.

134. Surgical diseases: textbook: in 2 volumes = Хирургические болезни: учебник: [гриф] / N. V. Merzlikin, N. A. Brazhnikova, B. I. Alperovich, V. F. Tskhai. – Moscow: GEOTAR-Media, 2021.

135. Lagoon, M. A. The Course of Faculty (Analitical) Surgery in Pictures, Tables and Schemes (Курс факультетской (аналитической) хирургии в рисунках, таблицах и схемах) /

M. A. Lagoon, B. S. Kharitonov, edited by professor S. V. Vertyankin – Москва: ГЭОТАР-Медиа, 2017. – 436 с.

136. Koshechkin V.A. Phthisiatry (Фтизиатрия): textbook: [гриф] / V.A. Koshechkin. – Moscow: GEOTAR-Media, 2019.

137. Endocrinological pathology = Эндокринологическая патология: educational electronic guide for foreign students of the General Medicine faculty / Ivanovo State Medical Academy. – Ivanovo: IvSMA, 2023. Pt. 1: Endocrinal pathology: principles of diagnostics and treatment = Эндокринная патология: принципы диагностики и лечения / И. А. Романенко, М. Н. Милеева, В. Б. Гринштейн; рецензент Г. А. Батрак.