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MINISTRY OF SCIENCE AND HIGHER EDUCATION

RUSSIAN FEDERATION

Federal State Autonomous Educational Institution of Higher Education

NORTH-CAUCASUS FEDERAL UNIVERSITY

APPROVED

Assoc. Prof. Kubanov S.I.

PhD in Medical Sciences

Dean

Faculty of Medicine and Biology

COURSE OUTLINE OF THE DISCIPLINE (MODULE)

«Practical Training for Acquiring Professional Skills and Experience in Professional Activities in the Positions of Mid-Level Medical Personnel»

Name of the discipline (module)

- Specialty: 31.05.01 General Medicine
- Mode of training: Full-time
- Year of commencement of studies: 2026
- Delivered in Semester: 6

Developed by:

Acting Head of the Department of Propaedeutics of Internal Diseases,

Cand. Sci. (Med.)

position

G.S. Ivchenko

full name

Stavropol 2026

1. Aims of the practical training:

The aims of the practical training for acquiring professional skills and experience in professional activities in the positions of mid-level medical personnel in specialty 31.05.01 General Medicine are to develop in students the professional and practical training for mastering the skills of working as junior medical personnel.

2. Objectives of the practical training:

The objectives of the practical training are:

- to perform the functional duties of junior medical personnel;
- to train in medical procedures and manipulations within the scope of work of junior medical personnel in caring for patients with diseases of the respiratory system, cardiovascular system, digestive organs, and urinary system; specific features of observation and care for elderly and senile patients, postoperative patients, severely ill and agonizing patients;
- to develop skills in conducting pre-medical measures in emergency conditions, ascertaining clinical and biological death, and the rules for handling a corpse.

3. Place of the practical training in the structure of the higher education program:

Practical training for acquiring professional skills and experience in professional activities in the positions of mid-level medical personnel belongs to the section "Practical Training" and is based on the knowledge and mastery of the materials of the following disciplines of the curriculum of this specialty: Public Health and Healthcare, Health Economics; Faculty Therapy; Faculty Surgery; Obstetrics and Gynecology; Otorhinolaryngology; Dermatovenereology; Urology; Ophthalmology; Neurology, Medical Genetics, Neurosurgery; Infectious Diseases; Evidence-Based Medicine; Current Issues of Neonatology; Fundamentals of Integrative Medicine.

In turn, practical training for acquiring professional skills and experience in professional activities in the positions of mid-level medical personnel serves as a basis for the successful completion of practical training of a diagnostic profile.

4. Place and time of the practical training:

Practical training for acquiring professional skills and experience in professional activities in the positions of mid-level medical personnel, in accordance with the curriculum, is conducted in the 3rd year, 6th semester, for 4 weeks (6 credits, 216 hours).

Venues of the practical training:

- Educational laboratories of the Department of Propaedeutics of Internal Diseases, Faculty of Medicine and Biology, North Caucasus Federal University
- State Budgetary Healthcare Institution of the Stavropol Territory "City Clinical Hospital No. 2" of Stavropol;
- State Budgetary Healthcare Institution "City Clinical Emergency Hospital" of Stavropol;
- State Budgetary Healthcare Institution of the Stavropol Territory "Stavropol Regional Clinical Perinatal Center No. 1" of Stavropol.

5. List of planned results of the practical training, correlated with the planned results of mastering the educational program

Code and definition of the competence	Code and definition of the indicator	Planned learning outcomes for the discipline (module) describing the stages of competency and indicator development
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UC-2. Able to manage a project at all stages of its life cycle.	IA-1 UC-2. Formulates the project goal, determines the set of interrelated tasks ensuring its achievement, and defines the expected results of solving the tasks. IA-2 UC-2. Develops an action plan for solving the project tasks, choosing the optimal method of solving them based on the current legal norms and available resources and constraints. IA-3 UC-2. Ensures the implementation of the project in accordance with the established goals, timelines, and costs, based on the current legal norms, available resources, and constraints, including through the use of digital tools.	Acquisition of specialized medical skills and their application in practical healthcare.
UC-3. Able to organize and manage the work of a team, developing a team strategy to achieve a set goal.	IA-1 UC-3. Participates in interpersonal and group interaction, using an inclusive approach, effective communication, methods of team building and team interaction in joint work within the framework of a set task. IA-2 UC-3. Ensures the work of the team to obtain optimal results of joint work, taking into account the individual capabilities of its members, the use of a methodology for achieving success, methods, information technologies, and foresight technologies. IA-3 UC-3. Ensures the fulfillment of set tasks based on monitoring teamwork and timely response to significant deviations.	Readiness for oral and written communication
UC-4. Able to apply modern communication technologies, including in foreign	IA-1 UC-4. Selects an acceptable style of business communication in	Readiness for oral and written communication

language(s), for academic and professional interaction.	the state language(s) and foreign language(s), as well as verbal and non-verbal means of interaction with partners in oral and written forms. IA-2 UC-4. Uses information and communication technologies to enhance the effectiveness of professional interaction and to search for the necessary information in the process of solving standard communicative tasks in the state language(s) and foreign language(s). IA-3 UC-4. Evaluates the effectiveness of the communication technologies used in professional interaction in the state language(s) and foreign language(s), and selects the optimal ones.	
UC-7. Able to maintain an appropriate level of physical fitness to ensure full-fledged social and professional activities.	IA-4 UC-7. Selects health-saving technologies to ensure full-fledged social and professional activities, taking into account the physiological characteristics of the body and living conditions. IA-5 UC-7. Plans one's working and free time for an optimal combination of physical and mental load and to ensure working capacity in professional activities. IA-6 UC-7. Maintains an appropriate level of physical fitness to ensure full-fledged social and professional activities and adheres to the norms of a healthy lifestyle.	Upbringing of a comprehensively developed personality. Readiness to act in non-standard situations and to select methods of protection in emergency situations.
GPC-1. Able to plan, organize and conduct classes in the field of professional training and continuing professional education,	IA-1 GPC-1. Uses the basic norms of medical law. IA-2 GPC-1. Applies ethical and	Acquisition of specialized medical skills and their application in practical healthcare.

applying knowledge and methodology in accordance with one's professional background.	deontological principles in practice and utilizes knowledge of the history of medicine.	
GPC-2. Able to conduct and monitor the effectiveness of measures for prevention, promotion of a healthy lifestyle, and sanitary and hygienic education of the population.	IA-1 GPC-2. Uses various techniques and methods for disseminating knowledge about a healthy lifestyle and for the sanitary and hygienic education of the population. IA-2 GPC-2. Demonstrates the ability to identify priority problems and health risks for the patient (population). IA-3 GPC-2. Develops and participates in conducting preventive measures to improve the level of health and prevent diseases of the patient (population).	Acquisition of specialized medical skills and their application in practical healthcare.
GPC-4. Able to use medical devices stipulated by the procedure for providing medical care, as well as to conduct patient examinations for the purpose of establishing a diagnosis.	IA-1 GPC-4. Applies medical technologies, medical devices, medicinal products, disinfectants, and their combinations in addressing professional tasks. IA-2 GPC-4. Applies diagnostic instrumental methods of examination for the purpose of establishing a diagnosis.	Formation of clinical reasoning. Acquisition of specialized medical skills and their application in practical healthcare.
GPC-5. Able to assess morphofunctional and physiological states and pathological processes in the human body to solve professional tasks.	IA-1 GPC-5. Assesses morphofunctional and physiological states and processes in the human body at the individual, group, and population levels to solve professional tasks. IA-2 GPC-5. Identifies pathological states and processes in the human body to solve professional tasks.	Formation of clinical reasoning
GPC-6. Able to organize patient care, provide primary health care, ensure the	IA-1 GPC-6. Able to organize patient care. IA-2 GPC-6.	Readiness to act in non-standard situations and to select methods of protection

organization of work and professional decision-making in emergency conditions at the pre-hospital stage, in emergency situations, epidemics, and in foci of mass casualties.	Provides primary health care. IA-3 GPC-6. Able to make professional decisions in emergency conditions at the pre-hospital stage, in emergency situations, epidemics, and in foci of mass casualties.	in emergency situations. Acquisition of specialized medical skills and their application in practical healthcare.
GPC-8. Able to implement and monitor the effectiveness of medical rehabilitation of the patient, including when implementing individual programs of rehabilitation and habilitation of persons with disabilities, and to assess the patient's ability to carry out labor activities.	IA-1 GPC-8. Draws up an individual plan of rehabilitation care together with the patient/family. IA-2 GPC-8. Monitors the effectiveness of medical rehabilitation of the patient, including when implementing individual rehabilitation programs for the patient. IA-3 GPC-8. Organizes the workspace and a safe hospital environment, and trains the family in adapting the living space to the needs of the patient and the person with a disability.	Acquisition of specialized medical skills and their application in practical healthcare.
GPC-9. Able to implement the principles of quality management in professional activities.	IA-1 GPC-9. Applies organizational and managerial and regulatory documentation in one's activities. IA-2 GPC-9. Solves professional tasks using the principles of the quality management system.	Readiness for oral and written communication. Acquisition of specialized medical skills and their application in practical healthcare.
GPC-10. Able to understand the principles of operation of modern information technologies and to use them for solving the tasks of professional activities.	IA-1 GPC-10. Maintains documentation support for professional activities, taking into account modern information technologies. IA-2 GPC-10. Uses algorithms for solving standard organizational tasks with the use of information technologies in professional activities. IA-3 GPC-10.	Readiness for oral and written communication. Acquisition of specialized medical skills and their application in practical healthcare.

	Carries out an effective search for information necessary for solving professional tasks, using legal reference systems and professional databases.	
GPC-11. Able to prepare and apply scientific, scientific and production, project, organizational and managerial, and regulatory documentation in the healthcare system.	IA-1 GPC-11. Demonstrates the ability to prepare and apply scientific, scientific and production, project, organizational and managerial, and regulatory documentation in professional activities. IA-2 GPC-11. Demonstrates the ability to apply modern methods of collecting and processing information necessary for conducting scientific research.	Formation of clinical reasoning. Acquisition of specialized medical skills and their application in practical healthcare.
PC-1. Ready to participate in the provision of emergency medical care in conditions requiring urgent medical intervention.	IA-1 PC-1. Able to carry out therapeutic measures when providing emergency medical care in conditions requiring urgent medical intervention. IA-2 PC-1. Able to identify conditions requiring the provision of medical care in an emergency form, including clinical signs of sudden cessation of blood circulation and respiration. IA-3 PC-1. Possesses the skills of assessing the condition of a patient requiring medical care in an emergency form, and the skills of recognizing conditions that pose a threat to the patient's life, including states of clinical death (cessation of vital functions of the human body (blood circulation and/or respiration)) requiring the provision of medical care in an emergency form.	Readiness to act in non-standard situations and to select methods of protection in emergency situations. Acquisition of specialized medical skills and their application in practical healthcare.
PC-2. Ready to collect and analyze patient complaints, medical history data,	IA-1 PC-2. Able to collect complaints, life and disease history of the	Formation of clinical reasoning

examination results, laboratory, instrumental, pathological-anatomical, and other investigations in order to recognize the condition or establish the presence or absence of a disease.	patient and analyze the obtained information. IA-2 PC-2. Conducts a complete physical examination of the patient (inspection, palpation, percussion, auscultation) and interprets its results. IA-3 PC-2. Formulates a preliminary diagnosis and draws up a plan for laboratory and instrumental examinations of the patient.	
PC-3. Able to identify the main pathological conditions, symptoms, syndromes of diseases, and nosological forms in a patient in accordance with the International Statistical Classification of Diseases and Related Health Problems, 10th Revision.	IA-1 PC-3. Able to construct an algorithm and select criteria for identifying the main pathological conditions, syndromes, and diseases in patients of various profiles in accordance with the International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10). IA-2 PC-3. Identifies the main pathological symptoms and syndromes, and formulates a clinical diagnosis in accordance with ICD-10.	Formation of clinical reasoning. Acquisition of specialized medical skills and their application in practical healthcare.
PC-6. Ready to determine the necessity of applying natural therapeutic factors, medicinal and non-pharmacological therapy, and other methods in patients requiring medical rehabilitation and sanatorium-resort treatment.	IA-1 PC-6. Able to plan measures for the medical rehabilitation of the patient, to determine medical indications and contraindications for their implementation, taking into account the diagnosis in accordance with the current procedures for providing medical care, clinical guidelines (treatment protocols) on the provision of medical care, with due regard to the standards of medical care. IA-2 PC-6. Determines medical indications for conducting medical rehabilitation	Acquisition of specialized medical skills and their application in practical healthcare.

	measures, including when implementing an individual program of rehabilitation or habilitation for persons with disabilities, in accordance with the current procedures for providing medical care, clinical guidelines (treatment protocols) on the provision of medical care, taking into account the standards of medical care.	
PC-7. Ability and readiness to implement a set of measures aimed at preserving and strengthening health, including the formation of a healthy lifestyle, prevention of the occurrence and (or) spread of diseases, their early diagnosis, identification of the causes and conditions of their occurrence and development, as well as those aimed at eliminating the harmful influence of environmental factors on human health.	IA-1 PC-7. Able to assess medical indications and medical contraindications for the application of methods of prevention of diseases and (or) conditions, and preventive measures taking into account the diagnosis in accordance with the current procedures for providing medical care, clinical guidelines (treatment protocols) on the provision of medical care, with due regard to the standards of medical care. IA-2 PC-7. Applies the principles of specific and non-specific prevention of infectious diseases, and the national immunization schedule, including for epidemic indications.	Acquisition of specialized medical skills and their application in practical healthcare.
PC-8. Ready to carry out educational activities aimed at eliminating risk factors and developing healthy lifestyle skills.	IA-1 PC-8. Able to clearly explain the significance of risk factors in diseases of internal organs and measures for the prevention of exacerbations. IA-2 PC-8. Identifies the features, determines the forms and methods of educational activities of medical workers among patients and the population aimed at eliminating risk factors and developing healthy lifestyle	Readiness for oral and written communication. Acquisition of specialized medical skills and their application in practical healthcare.

	skills.	
PC-9. Able to apply the basic principles of organization and management in the sphere of public health protection, in medical organizations and their structural units.	IA-1 PC-9. Able to apply the principles of monitoring the performance of job duties by the district nurse and other medical personnel at one's disposal. IA-2 PC-9. Assesses the effectiveness of modern medical-organizational and socio-economic technologies in the provision of medical care, and applies the principles of organization and management in the sphere of public health protection within medical organizations and their structural units.	Acquisition of specialized medical skills and their application in practical healthcare.
PC-10. Ready to participate in assessing the quality of medical care using basic medical-statistical indicators.	IA-1 PC-10. Calculates and analyzes the indicators of the quality of medical care. IA-2 PC-10. Develops measures aimed at improving the quality of medical care.	Readiness for oral and written communication. Acquisition of specialized medical skills and their application in practical healthcare.

6. Structure and Content of the Practical Training. The total workload of the practical training for acquiring professional skills and experience in professional activities in the positions of mid-level medical personnel is 6 credits, 216 hours.

Sections (Stages) of Practical Training	Competencies Developed	Types of Student Activities during the Practicum	Number of hours	Forms of ongoing assessment
Occupational safety briefing (on-the-job safety instruction)	IA-1 UC-2, IA-2 UC-2, IA-3 UC-2, IA-1 UC-3, IA-2 UC-3, IA-3 UC-3, IA-1 UC-4, IA-2 UC-4, IA-3 UC-4, IA-1 UC-7, IA-2 UC-7,	A general safety briefing and a briefing at each workplace for each type of work performed are conducted, which the student must master and sign in the protocol.	6	Performance of practical work. Solving research tasks.

	IA-3 UC-7, IA-1 GPC-1, IA-2 GPC-1, IA-3 GPC-1, IA-1 GPC-2, IA-2 GPC-2, IA-3 GPC-2, IA-1 GPC-4, IA-2 GPC-4, IA-3 GPC-4, IA-1 GPC-5, IA-2 GPC-5, IA-3 GPC-5, IA-1 GPC-6, IA-2 GPC-6, IA-3 GPC-6, IA-1 GPC-8, IA-2 GPC-8, IA-3 GPC-8, IA-1 GPC-9, IA-2 GPC-9, IA-3 GPC-9, IA-1 GPC-10, IA-2 GPC-10, IA-3 GPC-10, IA-1 GPC-11, IA-2 GPC-11, IA-3 GPC-11, IA-1 PC-1, IA-2 PC-1, IA-3 PC-1, IA-1 PC-2, IA-2 PC-2, IA-3 PC-2, IA-1 PC-3, IA-2 PC-3, IA-3 PC-3, IA-1 PC-6, IA-2 PC-6, IA-3 PC-6, IA-1 PC-7, IA-2 PC-7, IA-3 PC-7, IA-1 PC-8, IA-2 PC-8, IA-3 PC-8, IA-1 PC-9, IA-2 PC-9, IA-3 PC-9, IA-1 PC-10, IA-2 PC-10, IA-3 PC-10			
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Selection of research methods	IA-1 UC-2, IA-2 UC-2, IA-3 UC-2, IA-1 UC-3, IA-2 UC-3, IA-3 UC-3, IA-1 UC-4, IA-2 UC-4, IA-3 UC-4, IA-1 UC-7, IA-2 UC-7, IA-3 UC-7, IA-1 GPC-1, IA-2 GPC-1, IA-3 GPC-1, IA-1 GPC-2, IA-2 GPC-2, IA-3 GPC-2, IA-1 GPC-4, IA-2 GPC-4, IA-3 GPC-4, IA-1 GPC-5, IA-2 GPC-5, IA-3 GPC-5, IA-1 GPC-6, IA-2 GPC-6, IA-3 GPC-6, IA-1 GPC-8, IA-2 GPC-8, IA-3 GPC-8, IA-1 GPC-9, IA-2 GPC-9, IA-3 GPC-9, IA-1 GPC-10, IA-2 GPC-10, IA-3 GPC-10, IA-1 GPC-11, IA-2 GPC-11, IA-3 GPC-11, IA-1 PC-1, IA-2 PC-1, IA-3 PC-1, IA-1 PC-2, IA-2 PC-2, IA-3 PC-2, IA-1 PC-3, IA-2 PC-3, IA-3 PC-3, IA-1 PC-6, IA-2 PC-6, IA-3 PC-6, IA-1 PC-7,	Clinical Laboratory. General Clinical Methods of Investigation.	35	Performance of practical work. Solving research tasks. Defense of protocols. Summing up.
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	IA-2 PC-7, IA-3 PC-7, IA-1 PC-8, IA-2 PC-8, IA-3 PC-8, IA-1 PC-9, IA-2 PC-9, IA-3 PC-9, IA-1 PC-10, IA-2 PC-10, IA-3 PC-10			
Scientific work in laboratories	IA-1 UC-2, IA-2 UC-2, IA-3 UC-2, IA-1 UC-3, IA-2 UC-3, IA-3 UC-3, IA-1 UC-4, IA-2 UC-4, IA-3 UC-4, IA-1 UC-7, IA-2 UC-7, IA-3 UC-7, IA-1 GPC-1, IA-2 GPC-1, IA-3 GPC-1, IA-1 GPC-2, IA-2 GPC-2, IA-3 GPC-2, IA-1 GPC-4, IA-2 GPC-4, IA-3 GPC-4, IA-1 GPC-5, IA-2 GPC-5, IA-3 GPC-5, IA-1 GPC-6, IA-2 GPC-6, IA-3 GPC-6, IA-1 GPC-8, IA-2 GPC-8, IA-3 GPC-8, IA-1 GPC-9, IA-2 GPC-9, IA-3 GPC-9, IA-1 GPC-10, IA-2 GPC-10, IA-3 GPC-10, IA-1 GPC-11, IA-2 GPC-11, IA-3 GPC-11, IA-1 PC-1, IA-2 PC-1,	Schematically draws up in the form of a protocol the main mechanisms, illustrative schemes of biochemical processes, reveals the molecular- cellular, biophysical, biochemical, and genetic mechanisms of systemic processes, and summarizes the understanding of physiological mechanisms.	35	Performance of practical work. Solving research tasks. Defense of protocols. Summing up.

	IA-3 PC-1, IA-1 PC-2, IA-2 PC-2, IA-3 PC-2, IA-1 PC-3, IA-2 PC-3, IA-3 PC-3, IA-1 PC-6, IA-2 PC-6, IA-3 PC-6, IA-1 PC-7, IA-2 PC-7, IA-3 PC-7, IA-1 PC-8, IA-2 PC-8, IA-3 PC-8, IA-1 PC-9, IA-2 PC-9, IA-3 PC-9, IA-1 PC-10, IA-2 PC-10, IA-3 PC-10			
Work on hematology equipment and analysis of results	IA-1 UC-2, IA-2 UC-2, IA-3 UC-2, IA-1 UC-3, IA-2 UC-3, IA-3 UC-3, IA-1 UC-4, IA-2 UC-4, IA-3 UC-4, IA-1 UC-7, IA-2 UC-7, IA-3 UC-7, IA-1 GPC-1, IA-2 GPC-1, IA-3 GPC-1, IA-1 GPC-2, IA-2 GPC-2, IA-3 GPC-2, IA-1 GPC-4, IA-2 GPC-4, IA-3 GPC-4, IA-1 GPC-5, IA-2 GPC-5, IA-3 GPC-5, IA-1 GPC-6, IA-2 GPC-6, IA-3 GPC-6, IA-1 GPC-8, IA-2 GPC-8, IA-3 GPC-8,	Conducting hematological investigations using automatic and semi-automatic analyzers	35	Performance of practical work. Solving research tasks. Defense of protocols. Summing up.

	IA-1 GPC-9, IA-2 GPC-9, IA-3 GPC-9, IA-1 GPC-10, IA-2 GPC-10, IA-3 GPC-10, IA-1 GPC-11, IA-2 GPC-11, IA-3 GPC-11, IA-1 PC-1, IA-2 PC-1, IA-3 PC-1, IA-1 PC-2, IA-2 PC-2, IA-3 PC-2, IA-1 PC-3, IA-2 PC-3, IA-3 PC-3, IA-1 PC-6, IA-2 PC-6, IA-3 PC-6, IA-1 PC-7, IA-2 PC-7, IA-3 PC-7, IA-1 PC-8, IA-2 PC-8, IA-3 PC-8, IA-1 PC-9, IA-2 PC-9, IA-3 PC-9, IA-1 PC-10, IA-2 PC-10, IA-3 PC-10			
Conducting medical and social research	IA-1 UC-2, IA-2 UC-2, IA-3 UC-2, IA-1 UC-3, IA-2 UC-3, IA-3 UC-3, IA-1 UC-4, IA-2 UC-4, IA-3 UC-4, IA-1 UC-7, IA-2 UC-7, IA-3 UC-7, IA-1 GPC-1, IA-2 GPC-1, IA-3 GPC-1, IA-1 GPC-2, IA-2 GPC-2, IA-3 GPC-2, IA-1 GPC-4,	Study of objective data, extracts from patients' hospital records. Work in archives. Analysis of the obtained data.	35	Performance of practical work. Solving research tasks. Defense of protocols. Summing up.

	IA-2 GPC-4, IA-3 GPC-4, IA-1 GPC-5, IA-2 GPC-5, IA-3 GPC-5, IA-1 GPC-6, IA-2 GPC-6, IA-3 GPC-6, IA-1 GPC-8, IA-2 GPC-8, IA-3 GPC-8, IA-1 GPC-9, IA-2 GPC-9, IA-3 GPC-9, IA-1 GPC-10, IA-2 GPC-10, IA-3 GPC-10, IA-1 GPC-11, IA-2 GPC-11, IA-3 GPC-11, IA-1 PC-1, IA-2 PC-1, IA-3 PC-1, IA-1 PC-2, IA-2 PC-2, IA-3 PC-2, IA-1 PC-3, IA-2 PC-3, IA-3 PC-3, IA-1 PC-6, IA-2 PC-6, IA-3 PC-6, IA-1 PC-7, IA-2 PC-7, IA-3 PC-7, IA-1 PC-8, IA-2 PC-8, IA-3 PC-8, IA-1 PC-9, IA-2 PC-9, IA-3 PC-9, IA-1 PC-10, IA-2 PC-10, IA-3 PC-10			
Interpretation and processing of the obtained data	IA-1 UC-2, IA-2 UC-2, IA-3 UC-2, IA-1 UC-3, IA-2 UC-3, IA-3 UC-3, IA-1 UC-4, IA-2 UC-4,	Work documentation with	35	Performance of practical work. Completion of laboratory documentation. Defense of protocols. Summing up.

	IA-3 UC-4, IA-1 UC-7, IA-2 UC-7, IA-3 UC-7, IA-1 GPC-1, IA-2 GPC-1, IA-3 GPC-1, IA-1 GPC-2, IA-2 GPC-2, IA-3 GPC-2, IA-1 GPC-4, IA-2 GPC-4, IA-3 GPC-4, IA-1 GPC-5, IA-2 GPC-5, IA-3 GPC-5, IA-1 GPC-6, IA-2 GPC-6, IA-3 GPC-6, IA-1 GPC-8, IA-2 GPC-8, IA-3 GPC-8, IA-1 GPC-9, IA-2 GPC-9, IA-3 GPC-9, IA-1 GPC-10, IA-2 GPC-10, IA-3 GPC-10, IA-1 GPC-11, IA-2 GPC-11, IA-3 GPC-11, IA-1 PC-1, IA-2 PC-1, IA-3 PC-1, IA-1 PC-2, IA-2 PC-2, IA-3 PC-2, IA-1 PC-3, IA-2 PC-3, IA-3 PC-3, IA-1 PC-6, IA-2 PC-6, IA-3 PC-6, IA-1 PC-7, IA-2 PC-7, IA-3 PC-7, IA-1 PC-8, IA-2 PC-8, IA-3 PC-8, IA-1 PC-9, IA-2 PC-9, IA-3 PC-9,			
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	IA-1 PC-10, IA-2 PC-10, IA-3 PC-10			
Preparation of the practical training report	IA-1 UC-2, IA-2 UC-2, IA-3 UC-2, IA-1 UC-3, IA-2 UC-3, IA-3 UC-3, IA-1 UC-4, IA-2 UC-4, IA-3 UC-4, IA-1 UC-7, IA-2 UC-7, IA-3 UC-7, IA-1 GPC-1, IA-2 GPC-1, IA-3 GPC-1, IA-1 GPC-2, IA-2 GPC-2, IA-3 GPC-2, IA-1 GPC-4, IA-2 GPC-4, IA-3 GPC-4, IA-1 GPC-5, IA-2 GPC-5, IA-3 GPC-5, IA-1 GPC-6, IA-2 GPC-6, IA-3 GPC-6, IA-1 GPC-8, IA-2 GPC-8, IA-3 GPC-8, IA-1 GPC-9, IA-2 GPC-9, IA-3 GPC-9, IA-1 GPC-10, IA-2 GPC-10, IA-3 GPC-10, IA-1 GPC-11, IA-2 GPC-11, IA-3 GPC-11, IA-1 PC-1, IA-2 PC-1, IA-3 PC-1, IA-1 PC-2, IA-2 PC-2, IA-3 PC-2, IA-1 PC-3, IA-2 PC-3, IA-3 PC-3, IA-1 PC-6,	Summing up the results of the practical training	35	Submission of the report and defense of the practical training

	IA-2 PC-6, IA-3 PC-6, IA-1 PC-7, IA-2 PC-7, IA-3 PC-7, IA-1 PC-8, IA-2 PC-8, IA-3 PC-8, IA-1 PC-9, IA-2 PC-9, IA-3 PC-9, IA-1 PC-10, IA-2 PC-10, IA-3 PC-10			
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7. Methodological recommendations for students on undergoing practical training

7.1. Use of the materials of the educational and methodological complex of the practical training

At the first stage, it is necessary to become familiar with the structure of the practical training, the mandatory types of work, and the reporting forms.

For the successful completion of tasks in the practical training for acquiring professional skills and experience in professional activities in the positions of mid-level medical personnel, the student must fulfill the requirements of the practical training.

7.2. Assessment Tools Fund for the practical training

The Assessment Tools Fund (ATF) of the practical training for acquiring professional skills and experience in professional activities in the positions of mid-level medical personnel is based on the list of competencies to be mastered, indicating the stages of their formation during the practical training. The ATF ensures objective control over the achievement of the planned learning outcomes. The ATF includes:

- a description of indicators and criteria for evaluating competencies at various stages of their formation, and a description of the assessment scales;
- methodological materials defining the procedures for assessing knowledge, abilities, skills, and (or) experience of activities characterizing the stages of competency formation;
- standard control tasks and other materials necessary for assessing the knowledge, skills, and level of mastery of the competencies being formed during the practical training.

The ATF is an appendix to this practical training program.

8. Educational, Methodological, and Informational Support for the Discipline

8.1. List of Main and Additional Literature Required for Mastering the Discipline (Module)

8.1.1. List of Main Literature:

1. Kishkun A. A. Klinicheskaya laboratornaya diagnostika [Clinical Laboratory Diagnostics]: ucheb. posobie. Moscow: GEOTAR-Media, 2013. 962 p. Bibliogr.: pp. 957–962. ISBN 978-5-9704-2559-6.
2. Nasledstvennye bolezni. Polnyy spravochnik [Hereditary Diseases. Complete Reference Book] [Electronic resource]. Saratov: Nauchnaya kniga, 2019. 700 p. ISBN 978-5-9758-1854-6. Available at: <http://www.iprbookshop.ru/80196.html> (in Russian).
3. Eliseev Yu. Yu., Nazarova L. S., Belyakova N. I. et al. Polnyy spravochnik. Vnutrennie bolezni [Complete Reference Book. Internal Diseases] [Electronic resource]. Saratov: Nauchnaya kniga, 2019. 893 p. ISBN 978-5-9758-1873-7. Available at: <http://www.iprbookshop.ru/80177.html> (in Russian).

8.1.2. List of Additional Literature:

1. Baskakov M. B. Meditsinskaya fizika. Osnovy morfologii cheloveka i obshchey patologii kletki [Medical Physics. Fundamentals of Human Morphology and General Cell Pathology] [Electronic resource]: uchebnoe posobie. Tomsk: Tomskiy politekhnicheskii universitet, 2013. 115 p. ISBN 978-5-4387-0318-1. Available at: <http://www.iprbookshop.ru/34678.html> (in Russian).
2. Glukhareva T. V., Selezneva I. S. Biokhimiya. Chast' 2. Osnovnye regulatory i biologicheskie zhidkosti chelovecheskogo organizma [Biochemistry. Part 2. Main Regulators and Biological Fluids of the Human Body] [Electronic resource]: uchebnoe posobie. Yekaterinburg: Ural'skiy federal'nyy universitet, EBS ASV, 2016. 116 p. ISBN 978-5-7996-1843-8. Available at: <http://www.iprbookshop.ru/68227.html> (in Russian).
3. Klochko I. A. Informatsionnye tekhnologii v professional'noy deyatel'nosti [Information Technologies in Professional Activities] [Electronic resource]: uchebnoe posobie. Saratov: Vuzovskoe obrazovanie, 2014. 236 p. ISSN 2227-8397. Available at: <http://www.iprbookshop.ru/20424.html> (in Russian).
4. Korotyaev A. I., Babichev S. A. Meditsinskaya mikrobiologiya, immunologiya i virusologiya [Medical Microbiology, Immunology and Virology] [Electronic resource]. Saint Petersburg: SpetsLit, 2012. 760 p. ISBN 978-5-299-00425-0. Available at: <http://www.iprbookshop.ru/45694.html> (in Russian).
5. Novikova I. A., Khoduleva S. A. Klinicheskaya i laboratornaya gematologiya [Clinical and Laboratory Hematology] [Electronic resource]: uchebnoe posobie. Minsk: Vysheyshaya shkola, 2013. 447 p. ISBN 978-985-06-2226-6. Available at: <http://www.iprbookshop.ru/24061.html> (in Russian).
6. Pavlovich S. A. Mikrobiologiya s virusologiyey i immunologiyey [Microbiology with Virology and Immunology] [Electronic resource]: uchebnoe posobie. Minsk: Vysheyshaya shkola, 2013. 800 p. ISBN 978-985-06-2237-2. Available at: <http://www.iprbookshop.ru/24067.html> (in Russian).

8.2. List of Educational and Methodological Support for the Independent Work of Students in the Discipline (Module)

1. Metodicheskie ukazaniya po organizatsii i provedeniyu proizvodstvennoy praktiki po polucheniyu professional'nykh umeniy i opyta professional'noy deyatel'nosti na dolzhnostyakh srednego meditsinskogo personala [Methodological Instructions for Organizing and Conducting Practical Training for Acquiring Professional Skills and Experience in Professional Activities in the Positions of Mid-Level Medical Personnel] [Electronic resource]. Stavropol: SKFU, 2022. 40 p.

8.3. List of Resources of the Information and Telecommunications Network **Internet** Required for Mastering the Discipline (Module)

1. www.biomed.net — Club of the Biological and Medical Community
2. www.healthgate.net — Information Search in MEDLINE and Other Bibliographic Databases
3. www.elibrary.ru — Scientific Electronic Library
4. www.sbio.info — Information on All Sections of Biology
5. www.biologylib.ru — Library of Biology

9. List of Information Technologies Employed through the Discipline (Module), Including a List of Software and Information Reference Systems

When delivering lectures, computer equipment and demonstrations of multimedia presentation materials are used. In seminars and practical classes, students deliver presentations prepared by them during the hours of independent work.

Software:

- | | |
|----|--------------------|
| 1. | Alt Workstation 10 |
|----|--------------------|

2.	Alt Workstation K
3.	Alt Server
4.	Office software package – P7-Office

10. Specific Features of Mastering the Discipline (Module) by Persons with Disabilities

Students with disabilities shall be provided with special textbooks, teaching aids, and didactic materials, special technical training facilities for collective and individual use, the services of an assistant (helper) providing the necessary technical assistance to the students, as well as the services of sign language interpreters and tactile sign language interpreters.

The mastery of the discipline (module) by students with disabilities may be organized jointly with other students, as well as in separate groups.

Mastering the discipline (module) by students with disabilities is to be carried out taking into account the peculiarities of psychophysical development, individual capabilities, and health status.

In order to ensure the accessibility of higher education under the educational program for persons with disabilities, the following is provided during the mastery of the discipline (module):

- 1) for persons with visual impairments:
 - the presence of an assistant offering the student the necessary technical assistance, taking into account individual features (help taking the workplace, moving around, reading and formatting the task, including writing under dictation),
 - written tasks, as well as instructions on the procedure for their execution, are formatted in an enlarged font,
 - special textbooks, teaching aids, and didactic materials (having a large font or audio files),

individual uniform lighting of at least 300 lux,
if necessary, a magnifying device is provided to the student to complete the task;
- 2) for persons with hearing impairments:
 - the presence of an assistant providing the student with the necessary technical assistance, taking into account individual characteristics (helps to take a workplace, move around, read and format the task, including writing with dictation),
 - the availability of sound-amplifying equipment for collective use is ensured; if necessary, sound-amplifying equipment for individual use is provided to the student;
 - provision with proper sound means of reproducing information is ensured;
- 3) for persons with musculoskeletal disorders (including severe motor function impairments of the upper limbs or the absence of upper limbs):
 - written tasks are performed on a computer with specialized software or are dictated to an assistant;
 - at the request of the student, tasks may be performed verbally.

12. Specific Features of Implementing the Discipline with the Use of Distance Learning Technologies and E-Learning

Subject to Part 1 of Article 16 of the Federal Law of December 29, 2012, No. 273-FZ On Education in the Russian Federation, e-learning shall be viewed as the arrangement of educational activities employing information contained in databases and used in the implementation of educational programs, as well as information technologies, technical means, and information and telecommunication networks that ensure the processing and transmission of the specified information via communication lines, and the interaction of students and pedagogical workers.

Remote (distance) learning technologies are understood as educational technologies implemented mainly with the use of information and telecommunication networks during the indirect (at a distance) interaction of students and pedagogical workers.

The implementation of the discipline may be carried out with distance learning technologies and e-learning in full or in part. The components of the Educational And Methodological Complex (EMC) of the discipline (working program of the discipline, assessment and methodological materials, forms of attestation) implemented with the use of distance learning technologies and e-learning contain an indication of their use.

When arranging educational activities with distance learning technologies and e-learning, asynchronous and synchronous methods of interaction between participants in educational relations via the information and telecommunications network Internet may be offered.

When using distance learning technologies and e-learning, the schedule for the discipline shall indicate: methods of interaction among participants in educational relations via the information and telecommunications network Internet (VCC – videoconferencing, ET – electronic testing); links to the electronic information and educational environment of NCFU, to educational platforms and resources of other organizations to which open access is provided via the information and telecommunications network Internet; for synchronous learning – the time of online classes and instructors; for asynchronous learning – the authors of online courses.

When arranging intermediate attestation with distance learning technologies and e-learning, the Methodological Recommendations on the use of technical means ensuring the objective reliability of results when conducting intermediate and state final attestation for higher education educational programs – Bachelor's Degree programs, Specialist's Degree programs, and Master's Degree programs with distance learning technologies are used (Letter of the Ministry of Science and Higher Education of Russia dated December 7, 2020, # MN-19/1573-AN On sending methodological recommendations).

The implementation of the discipline with the use of e-learning and distance learning technologies is carried out using the electronic information and educational environment of NCFU, to which students are provided access via the information and telecommunications network Internet, or using the resources of other organizations, including platforms providing services for videoconferencing, online meetings, and distance learning (MTS-Link), as well as using the capabilities of social networks to carry out communication between students and instructors.

The educational and methodological support for a discipline shall be ensured with e-learning and distance learning technologies includes the working program presented in electronic form, educational and methodological manuals or a course of lectures, methodological guidelines for performing various types of educational activities of students provided for by the discipline, and other educational and methodological materials posted in the information and educational environment of NCFU.

