

Ministry of Health of the Russian Federation

**Federal State Budget-Funded Educational Institution of Higher Education
“I.I. Mechnikov’s North-Western State Medical University”
under the Ministry of Health of Russia**

**ABSTRACTS OF THE SYLLABI,
PRACTICAL TRAINING PROGRAMS**

Specialty 31.05.01 General Medicine

Focus The organization and provision of primary health care to the adult population in medical organizations.

Abstract of the Syllabus

«Philosophy»

Work load (credits/academic hours)	4 credits / 144 academic hours
Content	<p>The meaning and purpose of philosophy. Historical development of philosophy</p> <p>The problem of being, worldview concept are considered.</p> <p>Philosophical concepts of perception, subject-object relations in perception, sensuous and logical cognition and their forms are considered.</p> <p>Society as a system of relationships between people is studied.</p>
Part of the curriculum	The discipline "Philosophy" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Seminars, Self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus

«History (Russian History, World History)»

Work load (credits/academic hours)	2 credits /72 academic hours
Content	<p>History as a part of science. Features of state formation in Ancient Rus and the world.</p> <p>Russian lands in 13-16th centuries and the European Middle Ages. Russia in 17th century in the context of the development of European civilization.</p> <p>Russia and the World in the 18th century: Attempts at Modernization and the Industrial Revolution.</p> <p>Russia and the main trends of global development in the 19th century.</p> <p>The Russian Empire and the World at the turn of the 19-20th centuries.</p> <p>The formation of the Soviet state and alternatives to the development of Western civilization in the 20-30s of the 20th century.</p> <p>World War II and the Great Patriotic War: causes, periodization, outcomes.</p> <p>The USSR and the World in the 2nd half of the 20th century.</p> <p>Russia and the World at the turn of the 20th and 21st centuries.</p>

Part of the curriculum	The discipline "History (Russian History, World History)" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Seminars, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Social Science»

Work load (credits/academic hours)	2 credits/ 72 academic hours
Content	Society, social institutions, communities, systems and processes, spheres of direct social interaction: relations between individuals, communication processes in small groups, and the everyday environment are studied. The basics of the state and law theory are considered. The basics of constitutional law are studied.
Part of the curriculum	The discipline "Social Science" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Seminars, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Economics and Law»

Work load (credits/academic hours)	2 credits/ 72 academic hours
Content	General issues of economics. Fundamentals of market economy. Firms in the market economy. Macroeconomics: basic concepts and issues. Monetary policy. Fiscal policy. Fundamentals of administrative law, civil law, criminal law. The economic and legal aspects of health care.
Part of the curriculum	The discipline "Economics" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Seminars, Self-study

Assessment	Formative assessment Summative assessment – credit
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Abstract of the Syllabus
«History of Medicine»

Work load (credits/academic hours)	2 credits/ 72 academic hours
Content	<p>Sources of studying the history of medicine, periodization. Features of the healing in the pre-historic ages. General features of the development of healing in the countries of the ancient world.</p> <p>The development of medicine in Mesopotamia, ancient Rome, ancient China, ancient India, ancient Egypt, ancient Greece. Outstanding doctors of the ancient period.</p> <p>Medicine in the Early and High Middle Ages, medicine in the Arab Caliphates, Western Europe and the Americas. Development of medicine in the Renaissance. Influence of materialism on the development of medicine. The impact of scientific discoveries on the development of science and medicine. Development of clinical medicine. Outstanding doctors of the Modern Era.</p> <p>Development of medicine in the Ancient Rus, Moscow, Russia in 18-19-20th century. Outstanding personalities in medicine of the 20th century. Development of medical ethics and deontology.</p>
Part of the curriculum	The discipline "History of Medicine" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty) with focus on the organization and provision of primary health care to the adult population in medical organizations. The discipline is compulsory for studies.
Types of classes	Lectures, Seminars, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Basics of health behavior»

Work load (credits/academic hours)	2 credits/ 72 academic hours
Content	Population health indicators. Objectives of public health protection. Development of preventive health care. Problems of medical prevention. Behavioral risk factors.
Part of the curriculum	The discipline "Basics of health behavior" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty) with focus on

	the organization and provision of primary health care to the adult population in medical organizations. The discipline is compulsory for studies.
Types of classes	Lectures, Seminars, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Foreign (Russian) language»

Work load (credits/academic hours)	17 credits / 612 hours
Part of the curriculum	The discipline «Foreign (Russian) language» is studied in the 1 st -4 th semesters and relates to the compulsory part of the Unit 1.
Types of classes	Practical classes, Self-study
Assessment	Formative assessment: tests, reports (reproduction of a text, writing a monologue) Summative assessment – exam in the 4th semester
Content	<p>Studying the phonetics and graphics of the Russian language, learning to use the basic intonation samples of the Russian language.</p> <p>Study of the basics of word formation, morphology and syntax (basic grammar), formation and development of students' listening, reading, writing and speaking in Russian skills, skills of verbal realization of intentions in communication situations defined by the program in accordance with the Russian speech etiquette.</p> <p>Teaching foreign students to speak coherent utterances in Russian in accordance with the proposed topic, teaching them to understand the content of the speaker's utterances in certain situations, forming the dialogue skills in different communication situations.</p> <p>Study of the basic grammatical structures of the academic speech necessary for defining an object, describing its structure, location, functions, classification of objects, etc.</p> <p>Study of Russian vocabulary and terminology related to special disciplines. Use of the learnt vocabulary and formation of skills of its correct use. Formation and development of foreign students' abilities and skills of reproduction of scientific text in Russian with various degrees of text compression.</p>

Abstract of the Syllabus
«Latin language and fundamentals of terminology»

Work load (credits/academic hours)	3 credits/108 academic hours
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Content	History of the professional language of a doctor. About some theoretical issues of terminology. Fundamentals of medical terminology. Alphabet, phonetics Grammar: elements of morphology. Syntax of a nominal collocation. A general introduction to pharmaceutical terminology. Verb. Grammatical categories. Word compounding. Terminological word formation
Part of the curriculum	The discipline "Latin language and fundamentals of terminology" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Practical classes, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Psychology and Pedagogy»

Work load (credits/academic hours)	3 credits/ 108 academic hours
Content Subject and methods of psychology	Subject and methods of psychology. Cognitive mental processes. Emotional and volitional processes. Personality. Subject and methods of pedagogy, Social psychology. Small group. Conflicts.
Part of the curriculum	The discipline "Psychology and Pedagogy" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Basics of nursing staff professional activity»

Work load (credits/academic hours)	3 credits/ 108 academic hours
Content	Primary health care at the pre-hospital stage. Structure of medical organization. Resource-saving polyclinic. Check-up. Hygiene education for the population. Ethics and deontology Document management in the work of a nurse Therapeutic regimen. Medical ergonomics Nursing process.

	<p>Patient examination by a nurse Infection control Personal hygiene of nursing staff Personal hygiene of the patient Pre-hospital emergency care Nursing process in sedentary patients General principles of nursing work in geriatric care centers Provision of outpatient care to geriatric patients.</p>
Part of the curriculum	<p>Compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.</p>
Types of classes	<p>Lectures, Practical classes, Self-study</p>
Assessment	<p>Formative assessment Summative assessment – credit</p>

Abstract of the Syllabus
«Physical Education and Sport»

Work load (credits/academic hours)	<p>2 credits / 72 academic hours</p>
Content	<p>The subject area of the discipline “Physical Education and Sport” is a system of knowledge about exercising and the formation of abilities to use various forms of exercising and sport in everyday life to preserve and strengthen one’s health and the health of family, relatives and colleagues, as well as to improve the quality of life and efficiency of professional activity</p>
Part of the curriculum	<p>The discipline “Physical Education and Sport” relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.</p>
Types of classes	<p>Lectures, Practical classes, Self-study</p>
Assessment	<p>Formative assessment Summative assessment – credit</p>

Abstract of the Syllabus
«Medical Physics, Biophysics»

Work load (credits/academic hours)	<p>3 credits/ 108 academic hours</p>
Content	<p>Fundamentals of mathematical analysis of biological processes. Probability theory. Fluctuations in biological systems. Physical basis of hemodynamics. Thermodynamics of biological systems. Features of medical electronics. Physics of structure and functioning of biological membranes. Physical basis of ECG. Effect of high-frequency electromagnetic fields on biological objects. Lasers. Laser radiation and its</p>

	main parameters. Physical basis for X-ray systems.
Part of the curriculum	Compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Information Technology in Medicine»

Work load (credits/academic hours)	3 credits/ 108 academic hours
Content	Electronic databases. Medical information systems. Information retrieval. Basics of statistical data processing. Theoretical basis of informatics. Terminology, mathematical basis of computer functioning. Software for processing different types of data.
Part of the curriculum	Compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Chemistry»

Work load (credits/academic hours)	4 credits / 144 academic hours
Content	<ol style="list-style-type: none"> 1. Elements of chemical thermodynamics and chemical kinetics. 2. Intermolecular forces and aggregate states of matter. Water, its solutions, their colligative properties and their part in the environment and vital activity of the organism. 3. Main types of chemical equilibrium processes in living systems (protolytic, redox, heterogeneous, ligand-exchange equilibria). 4. Biogenic elements and the chemistry of environmental contaminants. 5. Fundamentals of physical chemistry of biological systems. Surface phenomena, adsorption and absorption. 6. Fundamentals of colloid chemistry. Dispersion systems, solutions of high molecular weight compounds and biopolymers in the functioning of living systems. Coarse

	<p>dispersion systems and their role in medicine.</p> <p>7. Heterofunctional organic compounds as essential components of living things, metabolites and medicines.</p> <p>8. Amino acids. Peptides. Proteins</p> <p>9. Carbohydrates. Monosaccharides. Oligosaccharides. Polysaccharides.</p> <p>10. Heterocyclic compounds. Nucleosides. Nucleotides. Nucleic acids.</p>
Part of the curriculum	The discipline "Chemistry" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practical classes, laboratory classes, self-study during theoretical training and exam preparation
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus
«Biochemistry»

Work load (credits/academic hours)	7 credits / 252 academic hours
Content	The subject area of the discipline "Biochemistry" is defined by a set of main biochemical processes and their molecular mechanisms in physiological and pathological conditions of the organism.
Part of the curriculum	The discipline "Biochemistry" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practical classes, laboratory classes, self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus
«Biology»

Work load (credits/academic hours)	6 credits / 216 academic hours
Content	<p>Structure and function of a cell. Cytoplasm. Organoids. Microscope. Microscopy, technique of preparations of microspecimens.</p> <p>Contemporary methods of studying cell and their use in medicine.</p> <p>The genetic apparatus. Cytogenetics of reproduction. Laws of inheritance. Gene inheritance.</p> <p>Features and methods of studying human heredity. Inheritance of the Rh factor.</p> <p>Human genetic (molecular) diseases. Principles of genetic</p>

	<p>counselling. Gene structure and function.</p> <p>The biological phenomenon of parasitism. Introduction to medical parasitology. Ecological bases of parasitism.</p> <p>Developmental biology. Phylogeny of chordates. Evolution of organs and functional systems. Current state of evolutionary theory. Population genetics.</p> <p>Homeostasis. Modern concepts of regeneration and transplantation.</p> <p>Principles and modes of evolution of chordate organ systems. Comparative review of vertebrate organ systems. Current state of evolutionary theory. Population structure of mankind.</p> <p>Human ecology. The biosphere theory. The role of contemporary biology in medicine.</p> <p>Problems of gerontology. Theories of ageing. Ecological factors that increase life expectancy.</p>
Part of the curriculum	The discipline “Biology” relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practical classes, self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus
«Anatomy»

Work load (credits/academic hours)	10 credits /360 academic hours
Content	Introduction; Structure and Stages of Development of the Human Body; Skeletal System; Joint System; Muscular System; Internal Organ Systems; Endocrine Glands; Lymphoid [Immune] System; Cardiovascular System; Nervous System; Sense Organs
Part of the curriculum	The discipline “Anatomy” relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practical classes, self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus
«Topographic Anatomy and Operative Surgery»

Work load (credits/academic hours)	5 credits / 180 academic hours
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Content	The content of the discipline "Topographic Anatomy and Operative Surgery» is aimed at fostering a specialist who knows the basics of clinical examination of surgical patients, and the principles of surgical treatment of major types of surgical diseases, as well as contemporary principles of emergency surgical care.
Part of the curriculum	The discipline "Topographic Anatomy and Operative Surgery" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practical classes, self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus
«Histology, Embryology, Cytology»

Work load (credits/academic hours)	6 credits / 216 academic hours
Content	<p>Cytology and embryology.</p> <p>Embryology. Human embryogenesis: main stages and their characteristics. The initial period of human development. Implantation. Placenta - development, morphofunctional characteristic, microscopic structure in different terms of pregnancy. Provisory organs - formation, morphofunctional features.</p> <p>General histology. Tissue development (histogenesis). Cell cycle. Morphofunctional characterisation of the processes of growth and differentiation, the period of active functioning, ageing and cell death. Histogenesis: the process of tissue development and repair. Blood: components and functions of blood. Morphofunctional characteristics of blood formed elements, their microscopic and ultramicroscopic structure.</p> <p>Embryonic histogenesis. Regeneration of structural components of nervous tissue.</p> <p>Specific histology. Nervous system. Sensory system. Cardiovascular system. Endocrine system: general characteristics, functions, classification. Digestive system. Respiratory system. Skin and its derivatives: morphofunctional characteristics, tissue composition, development, regeneration.</p> <p>Excretory system. The system of urinary organs and urinary excretion: characteristics, functions, embryonic sources of development. Reproductive system.</p>
Part of the curriculum	The discipline "Histology, Embryology, Cytology" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practical classes, self-study

Assessment	Formative assessment Summative assessment – exam
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Abstract of the Syllabus
«Normal Physiology»

Work load (credits/academic hours)	7 credits/252 academic hours
Content	The course content covers a range of issues related to the subject area: introduction to the subject, basic concepts of physiology, physiology of excitable tissues, physiology of the nervous system, physiology of the endocrine system, metabolism and energy, thermoregulation, physiology of excretion, physiology of digestion, physiology of respiration, physiology of the cardiovascular system, analysers, higher nervous activity.
Part of the curriculum	The discipline “Normal Physiology” relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practical classes, self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus
«Microbiology, Virology»

Work load (credits/academic hours)	7 credits/252 academic hours
Content	Basics of medical microbiology, taxonomy and classification of bacteria, viruses, fungi; morphology, physiology, genetics of microorganisms; antimicrobial drugs, disinfection and sterilization; biologics; principles of diagnostics of infectious diseases; Healthcare-associated infections (HAIs) in pediatrics. Infectious agents in children: respiratory infections; intestinal infections; purulent septic infections; blood infections; fungal infections. Viral infections in children: acute respiratory infections, acute intestinal infections, measles, rubella, mumps, HIV, vector-borne diseases.
Part of the curriculum	The discipline “Microbiology, Virology” relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practical classes, self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus
«Immunology»

Work load (credits/academic hours)	3 credits /108 academic hours
Content	The Syllabus for "Immunology" course is compiled in accordance with the federal state educational standard of higher education on specialty 31.05.01 General Medicine (level of education – specialist), field: Medicine. During the course, classical sections of clinical immunology and allergology are studied: immunity, central and peripheral organs of the immunity system, structural and functional organization of the immune system at different levels, innate immunity, adaptive immunity, pathology of immunity, basics of allergology. The course consists of lectures and practical classes.
Part of the curriculum	The discipline “Immunology” relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Pharmacology»

Work load (credits/academic hours)	7 credits /252 academic hours
Content	<p>Section 1. Introduction into pharmacology. General formulation. General pharmacology. Solid dosage forms. Soft dosage forms. Liquid dosage forms. Miscellaneous dosage forms. Pharmacokinetics. Pharmacodynamics.</p> <p>Section 2. Medications affecting the peripheral nervous system (afferent and efferent innervation). Medications affecting the function of respiratory system. Medications affecting the function of digestive system. Pharmacological characteristics of the following medication groups: Substances acting on the sensitive afferent nerves endings. Cholinergic medications. Adrenergic medications. Dopaminergic medications. Histaminergic medications. Antiallergic medications.</p> <p>Medications affecting the function of respiratory system. Medications affecting the function of digestive system.</p> <p>Section 3. Medications affecting the central nervous system (depressants and stimulants, psychotropic medications). Pharmacological characteristics of the following medication groups: General anesthetics. Alcohols. Sleep medications.</p>

	<p>Anticonvulsants. Narcotic and non-opioid analgesics, NSAIDs. Antipsychotics (neuroleptics), anxiolytics (tranquilizers), sedatives. Antidepressants, antimanic agents, psychostimulants, nootropics, tonic medications, analeptics.</p> <p>Section 4. Organotropic agents (agents affecting the cardiovascular system, water, ionic and acid-base balance, blood system. Substances affecting metabolism). Pharmacological characteristics of the following medication groups: Cardiotonic agents of glycosidic and non-glycosidic structure. Antiarrhythmic medications. Antihypertensive and hypertensive medications. Medications used in disorders of cerebral and peripheral circulation. Substances affecting fluid and electrolyte metabolism (diuretics, substances correcting acid-base balance, preparations of alkali and alkaline earth metals). Substances affecting haemostasis and haemopoiesis. Immunotropic medications. Vitamin preparations. Hormonal and antihormonal agents. Uterotonic medications.</p> <p>Section 5. Anti-infective medications. Pharmacological characteristics of the following medication groups: Antibiotics. Antifungal medicines. Synthetic antimicrobial medications. Antitubercular medications. Antiviral agents. Antispirochetal agents. Anthelmintics. Antiprotozoal agents. Antiseptics and disinfectants</p> <p>Section 6. Emergency pharmacology. General principles of therapy for acute poisoning. Emergency medical care in critical conditions. The concept of critical condition. Commonality of pathogenetic elements of critical conditions. Basic pharmacotherapy measures in critical conditions. Treatment of acute poisoning by medicinal substances. Medication interaction. Pharmacological characteristics of the medications used in acute poisoning and critical conditions.</p>
Part of the curriculum	The discipline "Pharmacology" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus
«Pathological Anatomy»

Work load (credits/academic hours)	7 credits /252 academic hours
Content	<p>Reversible and irreversible injury. Cellular alteration. Necrosis. Programmed types of cell death. Pathological anatomy of intracellular dystrophies.</p> <p>Pathological anatomy of stromal vascular dystrophies.</p> <p>Pathological anatomy of mineral and pigment metabolism</p>

	<p>disorders. Alteration outcomes: sclerosis and hyalinosis. Pathological anatomy of circulatory disorders (ischemia, hemorrhage, thrombosis, embolism).</p> <p>Pathological anatomy of inflammation. Exudative and proliferative inflammation. Pathological anatomy of compensatory and adaptive processes. Immunopathological processes: immunodeficiency, amyloidosis. General regularities of tumor growth. Pathological anatomy of tumors of epithelial and mesenchymal origin. Pathological anatomy of diseases of the cardiovascular system. Atherosclerosis. Coronary Artery Disease. Pathological anatomy of cerebrovascular disease and chronic lower limb ischemia. Pathological anatomy of hypertensive disease. Pathological anatomy of rheumatism. Heart defects. Rheumatic diseases.</p> <p>Pathological anatomy of kidney diseases.</p> <p>Pathological anatomy of diseases of gastrointestinal tract.</p> <p>Pathological anatomy of diseases of the liver, pancreas and gallbladder.</p> <p>Pathological anatomy of lung diseases: pneumonia, diffuse alveolar damage, pneumoconiosis, lung cancer. Pathological anatomy of tuberculosis. Pathological anatomy of diseases of endocrine system.</p> <p>Morphology of infection. Pathological anatomy of viral infections. Influenza. HIV-infection. Pathological anatomy of bacterial infections. Sepsis. Pathological anatomy of genetic diseases.</p>
Part of the curriculum	<p>The discipline "Pathological Anatomy" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.</p>
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus
«Pathophysiology»

Work load (credits/academic hours)	7 credits /252 academic hours
Content	<p>I. General pathophysiology: subject, goals and methods of pathophysiology. General etiology, pathogenesis. Role of reactivity in pathology. General nosology. Pathogenic effect of environmental factors. Typical pathological processes. Hypoxia. Microcirculation and peripheral blood circulation. Pathophysiology of temperature homeostasis. Fever. Inflammation. Acute phase response reactions. Immunopathology. Allergic reactions. Tumor process. Pathophysiology of genetic diseases.</p> <p>Common disorders of metabolism and regulation. Pathophysiology of adaptation. Typical disorders of carbohy-</p>

	<p>drate, energy, protein, fat metabolism. Common electrolyte imbalance. Common disorders of acid-base balance.</p> <p>II. Particular pathophysiology - Pathophysiology of organs and systems: Pathophysiology of cardiovascular, endocrine, respiratory, nervous, digestive systems; pathophysiology of liver, kidney, blood system and immunobiological surveillance.</p>
Part of the curriculum	The discipline "Pathophysiology" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – exam

**Abstract of the Syllabus
«Hygiene»**

Work load (credits/academic hours)	7 credits /252 academic hours
Content	The course of Hygiene provides competences by studying the basics of preventive medicine methodology and acquiring hygienic knowledge on assessing the impact of environmental factors on the health of the population in the field of health care management.
Part of the curriculum	The discipline "Hygiene" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – exam

**Abstract of the Syllabus
«Public Health and Health Care Management»**

Work load (credits/academic hours)	5 credits/ 180 academic hours
Content	Current issues of public health, study and analysis of health indicators of the population. Statistical research: methodology, organization, carrying out, analysis and presentation of results. Reliability of the results. Prevention basics. Key management functions: planning, organization, motivation, control. Resource management (labor, human, time). Teamwork. Conflict management. Leadership. Self-management, educational development. Quality management system. Quality of

	medical care. Management and analysis of medical organizations' work. Expertise of temporary disability. Lean technologies in healthcare. Basics of project activity.
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus
«Epidemiology»

Work load (credits/academic hours)	3 credits /108 academic hours
Content	Study subject of epidemiology. Its place in the structure of medical sciences, medical education and practical health care. Doctrine of the epidemic process. Epidemiological research method. Fundamentals of clinical epidemiology. Basics of prevention of infectious and non-infectious diseases. The peculiarities of prevention of airborne diseases, acute intestinal infections, HIV, hepatitis B, hepatitis C, hepatitis D, preventive measures for parasitic diseases. Organization of vaccination. Preventive and anti-epidemic measures aimed at preventing the spread of infection in the epidemic center, including in emergencies.
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty) with focus on the organization and provision of primary health care to the adult population in medical organizations. The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Clinical Pharmacology»

Work load (credits/academic hours)	3 credits /108 academic hours
Content	General issues of clinical pharmacology Clinical and pharmacological approaches to the selection and use of medications in diseases of internal organs
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of

	education - specialty) with focus on the organization and provision of primary health care to the adult population in medical organizations. The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Dermatology and Venerology»

Work load (credits/academic hours)	4 credits /144 academic hours
Content	Dermatology. Historical stages of development. Physiology of skin. Endogenous and exogenous factors in skin diseases. The concept of primary and secondary skin rashes. Etiology and pathogenesis of skin diseases of infectious and non-infectious genesis (allergic contact dermatitis, psoriasis, lichen planus, lupus erythematosus, scleroderma, pyodermitis, scabies, pediculosis. Dermatomycosis (opportunistic and pathogenic). Venerology. Current ICD classification of syphilis. Characteristics of the causative agent. Pathways and conditions of infection. Reinfection and superinfection. Clinical manifestations of early and late syphilis. Serodiagnosis. Early and late latent syphilis. Congenital syphilis. Pathways and conditions of transmission. Clinical manifestations of early and late congenital syphilis. Principles of contemporary therapy. Clinical and serological control. Deregistration.
Part of the curriculum	The discipline “Dermatology and Venerology” relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus
«Neurology»

Work load (credits/academic hours)	5 credits /180 academic hours
Content	Subject and history of clinical neurology. Impairment of voluntary movements. Syndromes of cerebellar lesions. Autonomic nervous system and syndromes of its damage The extrapyramidal nervous system and its diseases. Cerebrovascular diseases. Peripheral nervous system disorders. Infectious diseases of the nervous system.

Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus
«Psychiatry»

Work load (credits/academic hours)	3 credits /108 academic hours
Content	General issues of psychiatry.
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty) with focus on the organization and provision of primary health care to the adult population in medical organizations. The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Otorhinolaryngology»

Work load (credits/academic hours)	5 credits /180 academic hours
Content	<p>Methods of examination of the ENT organs. The structure of the ENT unit.</p> <p>Clinical anatomy and physiology of the outer, middle and inner ear.</p> <p>Clinical anatomy and physiology of the nose and sinuses.</p> <p>Clinical anatomy and physiology of the pharynx, larynx, esophagus, trachea, bronchi.</p> <p>Etiology, pathogenesis, clinical picture of diseases of the nose and sinuses.</p> <p>Etiology, pathogenesis, clinical picture of acute and chronic inflammatory diseases of the ear.</p> <p>Etiology, pathogenesis, clinical picture of acute and chronic diseases of the pharynx.</p> <p>Etiology, pathogenesis, clinical picture of acute and chronic diseases of the larynx, trachea, esophagus.</p> <p>Etiology, pathogenesis, clinical picture of diseases of the ENT organs, causing conditions requiring emergency and</p>

	urgent care.
Part of the curriculum	The discipline “Otorhinolaryngology” relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Ophthalmology»

Work load (credits/academic hours)	3 credits /108 academic hours
Content	The subject area of the discipline "Ophthalmology" is the formation of knowledge about a set of key clinical syndromes, diagnostic algorithms, differential diagnosis, necessary for the definition of main ophthalmological diagnosis of the disease in its typical manifestation; fundamental therapeutic and preventive measures. Formation of skills to identify deviations in the state of eyes and vision from the age norm in people of different ages, to carry out prophylaxis and provide first aid to ophthalmological patients.
Part of the curriculum	The discipline “Ophthalmology” relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Виды учебной работы	Lectures, Practical classes, Self-study
Форма контроля	Formative assessment Summative assessment – credit

Abstract of the Syllabus
«Forensic Medicine»

Work load (credits/academic hours)	3 credits /108 academic hours
Content	<ol style="list-style-type: none"> 1. Procedural basis and organization of forensic medical examination in the Russian Federation. 2. Forensic traumatology. Blunt force injuries. 3. Sharp force injuries 4. Gunshot wounds 5. Mechanical asphyxia and drowning 6. Damage caused by chemical and other physical factors 7. Forensic medical examination of living persons 8. Forensic thanatology 9. Examination of a corpse at the place of its detection 10. Forensic examination of a corpse

	11. Forensic medical examination in criminal and civil cases related to the health professionals' activity
Part of the curriculum	The discipline "Forensic Medicine" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – credit

Abstract of the Syllabus

«Life Safety»

Work load (credits/academic hours)	3 credits /108 academic hours
Content	The aim of mastering the discipline "Life Safety" is the formation of competences of the student. On the basis of ideas about the emergencies factors in peacetime and war-time, the discipline helps a medical student to develop a safety culture, comprehensive understanding, readiness and ability to act on prediction, assessment and organization of measures to provide medical care (up to specialised) to victims and elimination of consequences of natural and man-made hazards.
Part of the curriculum	The discipline "Life Safety" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus

«Obstetrics and Gynecology»

Work load (credits/academic hours)	10 credits /360 academic hours
Content	The content of the discipline covers a range of issues related to the subject area: physiological obstetrics, pathology of pregnancy, pathology of labour and postpartum period, perinatology, pregnancy and extragenital pathology, physiology and pathology of menstrual cycle, neuroendocrine syndromes in gynaecology, pelvic inflammatory disease, benign and malignant tumour-like diseases of female genital organs, underlying and precancerous diseases, disorders of development and localisation of female genital organs, endometriosis, trophoblastic diseases, spontaneous and in-

	duced abortion, ectopic pregnancy, emergency surgical pathology in gynaecology, modern surgical methods in gynaecology, infertility, family planning and contraception.
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)"
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus

«Pediatrics»

Work load (credits/academic hours)	8 credits / 288 academic hours
Content	History of Russian pediatrics. Child and infant mortality and ways to reduce it. Study of epidemiology, etiopathogenesis, classification, clinical manifestations, diagnosis, treatment and prevention of somatic diseases in different periods of childhood. Study of epidemiology, etiology, pathogenesis, clinical classification, supporting diagnostic criteria and differential diagnosis, specific complications, treatment and prevention of the most common infectious pathology in children.
Part of the curriculum	The discipline “Pediatrics” relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus

«Introduction (Propaedeutic) into internal diseases»

Work load (credits/academic hours)	9 credits/ 324 academic hours
Content	This course is intended to familiarise students with the objectives of the course of propaedeutic of internal medicine, the contemporary system of medical training, medical ethics and deontology. The student learns the scheme of medical history, the rules of questioning the patient, the method of general examination of the patient. Students are introduced to the methods of physical examination of the patient: visual examination, palpation, percussion, auscultation. Students acquire knowledge, skills and abilities to use these methods of examination to identify symptoms of pathological processes. Students are fa-

	<p>miliarised with laboratory and instrumental methods of examination of the patient.</p> <p>Students acquire knowledge and skills in determining the syndromic diagnosis and patient examination plan.</p>
Part of the curriculum	<p>The discipline “Introduction (Propaedeutic) into internal diseases” relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.</p>
Types of classes	<p>Lectures with the use of active forms of learning: discussion, lecture-presentation, interactive lecture, problem-based lecture.</p> <p>Practical classes involving role-play, group discussion, situation analysis, simulation training, analysis of simulation models</p>
Assessment	<p>Formative assessment</p> <p>Summative assessment – exam</p>

Abstract of the Syllabus
«Radiology Diagnostics»

Work load (credits/academic hours)	3 credits / 108 academic hours
Content	<p>Introduction to radiology diagnostics. General issues of radiology diagnostics. Methods and instruments of radiology diagnostics.</p> <p>Radiology diagnostics of the bronchopulmonary system diseases, emergency conditions and diseases.</p> <p>Radiology diagnostics of the gastrointestinal tract and hepato-biliary and pancreatoduodenal area, emergency conditions and diseases.</p> <p>Radiology diagnostics of the cardiovascular system.</p> <p>Methods of radiology diagnostics of the urinary system diseases, urgent conditions and diseases of the urinary system.</p> <p>Radiology diagnostics in endocrinology.</p> <p>Radiology diagnostics of the reproductive system.</p> <p>Radiology diagnostics of diseases and injuries of musculoskeletal system.</p> <p>Radiology diagnostics in otorhinolaryngology and ophthalmology.</p> <p>Radiology diagnostics of the central nervous system.</p> <p>Interventional radiology.</p>
Part of the curriculum	<p>The discipline “Radiology Diagnostics” relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.</p>
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment

	Summative assessment – credit
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Abstract of the Syllabus
«Physician's communication skills»

Work load (credits/academic hours)	5 credits / 180 academic hours
Content	<p>"Ethics and Deontology" studies the philosophical foundations of ethics and deontology, which includes the consideration of medical ethics as an interdisciplinary science, the basic principles and rules of medical ethics, ethics as a science of morality, the essence of interpersonal communication in medicine, medical and ethical features of communication between doctors and patients. Students learn about the history of the formation of ethical relations in medicine, analyse the significance and main functions of ethics committees in conducting medical experiments and research. Ethical problems of HIV infection, death and dying, euthanasia and abortion are discussed in detail. Ethical issues in the fields of transplantation, genetics, psychiatry and oncology are also considered.</p> <p>"Practical session on the psychology of communication"</p> <p>Development of communication skills. Interpersonal communication. Three sides of communication. Specificity of verbal and non-verbal communication. Means of communication. Mechanisms of social perception. Errors of social perception. Barriers in communication: external and internal. Factors of effective communication in different types of activity. Internal and external factors of effective communication. Individual features contributing and hindering the development of communicative competence. Situations of communication. Professional environment of communication. Positions of interlocutors.</p> <p>Business communication: Argumentation. Objections. Types of questions. Decision-making. Sabotage of the communication process. Decision fixation. Completion of communication. General mistakes in communication.</p> <p>"Communication Skills." Types of communication skills. Structuring communication. Active listening. Working with objections. Public speaking. Peculiarities of communication in the professional activity of a physician.</p> <p>Manipulative communication. Counteraction to manipulation</p> <p>Features of manipulative communication, manipulative style of communication. Ways (techniques) of counteracting manipulative communication. Assertiveness.</p> <p>Communication in a conflict situation</p> <p>Conflict-prone individuals (physicians and patients). Methods of conflict management in the professional activity of a physician. Prevention of conflicts in medical practice. Pre-</p>

	vention of occupational burnout. Basics of psychic self-regulation of a physician in a conflict job situation. Patient-centered communication. Physician-Patient relationship models: the informative, the deliberative, the interpretative, the paternalistic. The structure of physician-patient communication: establishing contact, interacting with the patient, closing skills. The Calgary-Cambridge model of the physician-patient relationship (starting the appointment, gathering information, structuring the consultation, building the relationship, explaining and planning, ending the appointment).
Part of the curriculum	Compulsory part of the Unit 1 of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, Practical classes, Self-study
Assessment	Formative assessment Summative assessment – exam

Abstract of the Syllabus
«Intermediate Course of Therapy»

Work load (credits/academic hours)	9 credits /324 academic hours
Content	<p>The definition, risk factors, etiology, pathogenesis, hemodynamic changes, clinical picture, diagnosis, classification and basic principles of treatment of the most common diseases of the cardiovascular system: CHD, angina pectoris, myocardial infarction, hypertension, rhythm and conduction disorders, acquired heart diseases, acute and chronic heart failure, infective endocarditis, hypertrophic and restrictive cardiomyopathies are discussed.</p> <p>The issues of detection and referral of patients for medical rehabilitation and resort treatment are considered. The pulmonology section includes the definition, etiology, pathogenesis, clinical picture, diagnosis, classification and basic principles of treatment of diseases, the leading manifestation of which is bronchial obstruction syndrome: bronchial asthma, chronic obstructive pulmonary disease, as well as diseases with inflammation of the lung parenchyma: pneumonia, in-hospital and out-of-hospital. In addition, we will discuss acute pulmonary heart disease taking pulmonary embolism as an example. The gastroenterology section includes the definition, etiology, pathogenesis, clinical picture, diagnosis, classification and basic principles of treatment of acid-related disorders: gastroesophageal reflux disease, chronic gastritis, peptic ulcer disease, liver diseases: chronic hepatitis, cirrhotic stage of chronic hepatitis.</p> <p>The nephrology section includes the definition, etiology, pathogenesis, clinical picture, diagnosis, classification and basic principles of treatment of diseases affecting different</p>

	<p>levels of the nephron: acute and chronic glomerulonephritis, chronic pyelonephritis, acute and chronic interstitial nephritis, acute kidney injury.</p> <p>The hematology section includes a discussion of the definition, etiology, pathogenesis, clinical picture, diagnosis, classification and basic principles of treatment of diseases:</p> <ul style="list-style-type: none"> - of medullary hematopoiesis: acute and chronic leukemia, - anemias: iron-, B12-folium-deficient, hemolytic, chronic inflammation; - diseases associated with pathology of cellular, vascular and plasma hemostasis. In particular, the problem of bleeding caused by anticoagulants and antiaggregants is discussed. <p>The rheumatology section includes the definition, etiology, pathogenesis, clinical picture, diagnosis, classification and basic principles of treatment of acute rheumatic fever and osteoarthritis.</p> <p>In the section of metabolic diseases, the definition, etiology, pathogenesis, clinical picture, diagnosis, classification and basic principles of treatment of gout, metabolic syndrome, non-alcoholic fatty liver disease are discussed.</p>
Part of the curriculum	<p>The discipline "Intermediate Course of Therapy" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.</p>
Types of classes	<p>Classroom work: lectures, practical classes, self-study, exam preparation;</p> <p>Summative assessment: exam, including group consultations</p>
Assessment	<p>Formative assessment</p> <p>Summative assessment – exam</p>

Abstract of the Syllabus
«Clinical pathological anatomy»

Work load (credits/ academic hours)	2 credits / 72 academic hours
Content	<p>Organization of the pathology service in the Russian Federation.</p> <p>Autopsy examination. The doctrine of diagnosis.</p> <p>Pathological anatomy of sudden cardiac death.</p> <p>Pathomorphological examination of biopsy and surgical material.</p> <p>In-life diagnostics (surgical and biopsy material) in particular sections of pathology: breast cancer, prostate cancer, lung cancer, stomach cancer, colorectal cancer.</p> <p>Pathological anatomy of hemoblastoses: acute and chronic leukemias, Hodgkin's and non-Hodgkin's lymphomas, paraproteinemic leukemias (myeloma).</p>
Part of the curriculum	<p>The discipline "Clinical Pathophysiology" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty</p>

	31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Clinical pathophysiology»

Work load (credits/ academic hours)	2 credits / 72 academic hours
Content	Clinical pathophysiology of typical pathological processes: inflammatory process, immunopathology, fundamentals of population genetics, cell pathology. Clinical pathophysiology of metabolic disorders and regulation: disorders of water-electrolyte balance, disorders of acid-basic metabolism, etiopathogenetic rationale of the therapy of disorders of water-electrolyte acid-basic metabolism. Clinical pathophysiology of organs and systems: cardiovascular, endocrine, respiratory, digestive systems; pathophysiology of the liver, kidneys, blood system and immunobiological observation, RASK system, clinical pathophysiology of psychosomatic diseases. Etiopathogenetic rationale of therapy of organ and system disorders.
Part of the curriculum	The discipline "Clinical Pathophysiology" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Dentistry»

Work load (credits/ academic hours)	2 credits / 72 academic hours
Content	Directions of prevention of major dental diseases in people of different age groups. Features of development, structure and physiology of organs of the maxillofacial area as factors providing normal functioning and protection from pathogenic effects. Etiology and pathogenesis of dental decay, diagnostic methods and treatment. Non-carious lesions of teeth risk factors for the development of dental caries, diseases of dental hard tissues. Etiology and pathogenesis of inflammatory periodontal diseases, diagnostic methods and treatment. Etiology and pathogenesis of infectious, traumatic, allergic

	diseases of the oral mucous membrane, diagnostic methods and treatment. Etiology and pathogenesis of inflammatory lesions of the maxillofacial area, diagnostic methods and treatment.
Part of the curriculum	The discipline "Dentistry" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Interpretation of laboratory test results in the outpatient patient»

Work load (credits/ academic hours)	2 credits / 72 academic hours
Content	<p>Includes three major sections.</p> <p>Section 1: Laboratory screening and preparation of the outpatient patient.</p> <p>1.1 Pre-analytical stage. Centralized laboratory examination.</p> <p>1.2 Analytical stage.</p> <p>1.3. Decentralized laboratory examination.</p> <p>Section 2: Laboratory markers of nosologic pathology:</p> <p>2.1 Modern technologies of urine testing at the outpatient stage.</p> <p>2.2 Peculiarities of urine composition changes in an outpatient. Algorithms of laboratory diagnostics of kidney diseases. Diagnostics of chronic kidney disease.</p> <p>2.3 Clinical blood test. Laboratory indicators and technologies.</p> <p>2.4 Algorithms of laboratory diagnostics of blood system diseases at the outpatient stage: laboratory markers of anemias. Laboratory markers of oncohematologic diseases.</p> <p>2.5. Algorithms of laboratory diagnostics of liver and pancreas diseases.</p> <p>2.6. Laboratory screening of thyroid diseases.</p> <p>2.7 Laboratory evaluation of the hemostasis system. Laboratory markers for assessing the effectiveness of thrombolytic therapy.</p> <p>2.8 Laboratory screening of emergency conditions.</p> <p>2.9. Immunohematology.</p> <p>2.10. Biological markers of tumor diseases, importance in diagnostics.</p> <p>2.11. Laboratory screening in infectious diseases.</p> <p>Section 3: Composition of a laboratory diagnosis.</p>
Part of the curriculum	The discipline "Interpretation of laboratory test results in the outpatient patient " relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional ed-

	educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment - credit

Abstract of the Syllabus
«Sports medicine and physical therapy»

Work load (credits/ academic hours)	2 credits / 72 academic hours
Content	Introduction into legislation of the Russian Federation on physical culture and sport, health care; regulatory, methodological and program documents that determine the directions and prospects of development of physical culture and sport, health care; general aspects of the organization of physical therapy and sports medicine in the Russian Federation; basic aspects of the theory and methods of physical education and sport; hygiene of physical exercises and sports facilities. Organization of medical control in physical training and sports. Medical and biological support. Functional tests. Unexpected death in sports. Medical and pedagogic observations. Doping and sport. Medical permissions to physical training and sports. Fundamentals of therapeutic physical training. Forms and means of physical therapy. Organization and conduct of therapeutic physical training in the clinic of internal diseases, in traumatology and orthopedics, in neurology.
Part of the curriculum	The discipline " Sports medicine and physical therapy" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Occupational diseases»

Work load (credits/ academic hours)	3 credits / 108 academic hours
Content	Definition, role of the discipline in the history of domestic and foreign medicine; concept and classification of occupational diseases; spread and etiology of occupational diseases. General principles and procedure for providing medical care to patients with occupational diseases. Basic principles of medical and social expertise and rehabil-

	<p>itation of patients with occupational diseases. Prevention of occupational diseases of employees - peculiarities of organization and conduct of pre-employment and periodic medical check-ups.</p> <p>Pneumoconiosis, occupational COPD. Occupational bronchial asthma. Etiology, classification, clinical forms, clinic, diagnosis, differential diagnosis, complications, treatment, prevention, ITU, rehabilitation. Vibration disease. Occupational diseases from exposure to noise, infra- and ultrasound. Occupational diseases from exposure to ionizing and non-ionizing radiation. Etiology, pathogenesis, clinic, diagnosis, treatment, prophylaxis, ITU, issues of expertise of professional suitability. Occupational intoxications with a predominant damage to the nervous system. Occupational intoxication with irritating substances:</p> <p>Occupational intoxication with heavy metals. Acute and chronic occupational intoxication with organic solvents.</p> <p>Occupational intoxication with pesticides, toxic chemicals. Etiology, pathogenesis, clinic, diagnostics, principles of treatment, ITU, rehabilitation and prophylaxis, expertise of professional capability.</p> <p>Occupational diseases of the musculoskeletal system (OMS) and peripheral nervous system (PNS). Etiology, pathogenesis, clinic, diagnosis, principles of treatment, ITU, rehabilitation and prevention, assessment of occupational suitability.</p> <p>Occupational diseases associated with high neuro-emotional tension. Occupational infectious and parasitic diseases. Peculiarities of assessment of connection of infectious and parasitic disease with occupation. Occupational diseases in medical personnel.</p>
Part of the curriculum	<p>The discipline "Occupational diseases" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.</p>
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Advanced Therapy»

Work load (credits/ academic hours)	10 credits / 360 academic hours.
Content	The discipline "Hospital Therapy" is defined by the combination of basic clinical syndromes, diagnostic algorithms, differential diagnostics, necessary for the formation of the diagnosis of disease, basic therapeutic and preventive measures in patients based on all the features of their

	<p>lives, professional activities:</p> <p>Cardiology. Atherosclerosis. Etiopathogenesis. Clinical manifestations depending on localization. Therapy. Chronic forms of IBS. Acute coronary syndrome. Tactics of patient management. Cardiac rhythm and conduction disorders. Acute and chronic heart failure. Inflammatory diseases of myocardium and pericardium. Differential diagnosis and treatment of arterial hypertension</p> <p>Pulmonology. Methods of examination for pulmonary diseases. Differential diagnosis in pulmonary tissue infiltration syndrome and Cardiology of rounded masses in the lung tissue and mediastinum. Management of patients with pleural effusion. Obstructive lung diseases. Respiratory insufficiency: definition, classification, approaches to diagnosis and therapy. Gastroenterology. Differential diagnosis of the common diseases of the esophagus and stomach. Differential diagnosis of major liver diseases. Differential diagnosis of jaundice. Differential diagnosis and medical tactics in diseases of the biliary tract and pancreas. Inflammatory diseases of the intestine. Non-specific ulcerative colitis. Crohn's disease. Differential diagnosis of the major diseases of the intestine. Diseases of the colon and rectum.</p> <p>Nephrology. Methods of research in nephrology. Differential diagnosis in urinary syndrome. Tubulo-interstitial renal diseases. Chronic pyelonephritis. Chronic glomerulonephritis. Nephrotic syndrome. Amyloidosis. Chronic kidney disease. Rheumatology. Rheumatoid arthritis. Gout. Osteoarthritis. Systemic lupus erythematosus. Systemic vasculitis. Hematology. Differential diagnosis of anemia. Lymphoproliferative diseases. Chronic lympholeukemia. Hodgkin's and non-Hodgkin's lymphomas. Myeloproliferative diseases. Chronic myeloleukosis, idiopathic myelofibrosis. Polycythemia. Myeloma disease. Differential diagnosis of hemorrhagic diathesis.</p>
Part of the curriculum	The discipline "Advanced Therapy" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – exam

Abstract of the Syllabus
«Temporary Disability Assessment»

Work load (credits/ academic hours)	2 credits / 72 academic hours
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Content	<p>The program contains 3 sections:</p> <p>Section 1: Organization and proceedings of the temporary disability examination in the Russian Federation is aimed at mastering and consolidation of professional knowledge, practical skills and abilities that ensure the performance of labor functions on the issues of temporary disability examination in the Russian Federation.</p> <p>Section 2: Modern concepts of medical and social expertise aim at mastering and consolidating professional knowledge, practical skills and abilities, ensuring the fulfillment of labor functions on the issues of medical and social expertise in the RF.</p> <p>Section 3: Temporary disability assessment in the most common diseases includes practical consolidation of professional knowledge, practical skills and abilities to ensure the performance of labor functions in the most common diseases.</p>
Part of the curriculum	The discipline " Temporary Disability Assessment " relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

**Abstract of the Syllabus
«Infectious Diseases»**

Work load (credits/ academic hours)	9 credits / 324 academic hours
Content	<p>General issues in infectious pathology</p> <p>Particular issues of infectious pathology</p> <p>Differential diagnostics of infectious diseases</p>
Part of the curriculum	The discipline "Infectious Diseases" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – exam

Abstract of the Syllabus «Phthisiology»

Work load (credits/ academic hours)	5 credits / 180 academic hours
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Content	<p>Modern epidemiology of tuberculosis. Risk factors, sources and routes of transmission. Etiology, pathogenesis, pathanatomy of TB, structure of tuberculosis tuberculous tubercle. Immunity and allergy in TB. Pathogenesis of primary infection with MBT. The concept of early period of primary infection. Latent TB infection and tuberculosis disease. Ways of spreading infection within the body.</p> <p>Primary TB. TB intoxication of children and adolescents, TB of intrathoracic lymph nodes, primary TB complex. Pathogenesis, clinic, diagnosis, outcomes.</p> <p>Disseminated forms of tuberculosis. Variants of dissemination by genesis. Miliary TB. Pre- and chronic course of disseminated TB. Pathogenesis, clinic, diagnostics, outcomes.</p> <p>Secondary TB. Focal, infiltrative tuberculosis. Caseous pneumonia. Tuberculoma. Pathogenesis, clinic, diagnostics, outcomes.</p> <p>Cavernous TB. Fibrotic cavernous and cirrhotic TB. Pathogenesis, clinic, diagnosis, outcomes. TB pleuritis. Pleural empyema. TB meningitis. Pathogenesis, clinic, diagnostics, differential diagnostics. Complications of pulmonary TB: acute and chronic. Pulmonary hemorrhage, spontaneous pneumothorax. Clinic, diagnostics. Emergency measures in acute complications of tuberculosis. TB of extrapulmonary localization: TB of bones and joints, kidneys, kidney, kidney organs, peripheral lymph nodes, eyes, skin; abdominal tuberculosis. TB in combination with other diseases (HIV infection, alcoholism, peptic ulcer disease, diabetes, COPD, mental illness, silicotuberculosis, etc.). Differential diagnosis of intrathoracic adenopathy syndrome. Differential diagnosis of disseminated processes in the lungs. Differential diagnostics of infiltrative formations in lungs. Differential diagnostics of cavity formations in lungs. Methods of clinical diagnosis of TB: complaints, anamnesis, physical, laboratory methods, immunodiagnostics, radiation, endoscopic methods, biopsy. Clinical classification of TB. Principles of construction. Formulation of diagnosis of clinical form of TB. Classification of TB according to ICD-10.</p> <ul style="list-style-type: none"> - Organization and ways of early and timely detection of TB: immunodiagnostics in children, prophylactic fluorography in adults, epidemiological method (in tuberculosis infection foci), detection of TB from polyclinic risk groups ("TB masks", "background diseases", "social risk groups"). Detection of TB on demand. Clinical minimum screening for TB. - Principles of treatment of TB patients. Specific chemotherapy. Pathogenetic treatment. Col-lapsotherapy. Surgical methods of TB treatment. Cure criteria; - Prevention of TB: specific (BCG vaccination, chemoprophylaxis, preventive treatment of LTI), sanitary (isolation of bacterial isolates, disinfection means and methods, sanitary propaganda), social prevention of TB. <p>TB dispensary, its structure and functions. Groups of dis-</p>
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	<p>dispensary observation.</p> <p>Foci of TB infection, criteria of danger. Types. Anti-epidemic measures in foci of TB. Organizational and methodological work of the dispensary with the general medical network.</p>
Part of the curriculum	<p>The discipline " Phthisiology " relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.</p>
Types of classes	Lectures, practicals, self-study
Assessment	<p>Formative assessment;</p> <p>Summative assessment – exam</p>

Abstract of the Syllabus «Out-patient Therapy»

Work load (credits/ academic hours)	12 credits / 432 academic hours
Content	<p>Organizational and management activities in primary health care. The role of primary health care in the health care system. Issues of competence of the primary health care physician. Evaluation and analysis of their own activities.</p> <p>Socially significant problems and processes affecting the health of the population. Fundamentals of administration and management in primary health care. Medical law and medical insurance. Legal aspects of a doctor's practice.</p> <p>Formalization and maintenance of medical documentation in primary health care. Ethical foundations of patient-doctor relations in primary health care. Fundamentals of professional communication.</p> <p>Medical activity in primary health care. Principles of emergency and urgent care in outpatient settings. The most common clinical symptoms, syndromes and diseases in outpatient settings: principles of diagnosis, differential diagnosis and treatment in primary care.</p> <p>Prevention in primary health care. Dispenserization and dispenser observation in primary health care. Palliative care in primary care. Provision of personalized general therapeutic care in outpatient settings. Principles of management of pregnant women with somatic diseases. Geriatric care in outpatient settings.</p> <p>Research activities in primary health care. Technology assessment and evidence-based medicine. Analysis of medical information. Medical and statistical analysis.</p>
Part of the curriculum	<p>The discipline " Out-patient Therapy" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.</p>
Types of classes	Lectures, practicals, self-study

Assessment	Formative assessment; Summative assessment – exam
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Abstract of the Syllabus

«General Surgery»

Work load (credits/ academic hours)	6 credits /216 academic hours
Content	<p>Surgical procedure. Asepsis. Antisepsis. Bleeding. Stoppage. Thermal damage. General issues of traumatology. Closed injuries (diagnosis, tactics). Fractures and dislocations (concept, diagnosis, transport and therapeutic immobilization). Open injuries (wounds), treatment of wounds.</p> <p>Fundamentals of transfusiology. Circulatory disorders. Basics of oncology. Surgical infection of the skin, subcutaneous tissue, glandular organs.</p> <p>Surgical infection of fingers and hand. Surgical infection of bones and joints. Anaerobic and acute specific infections. Inflammation of serous cavities. Sepsis.</p>
Part of the curriculum	The discipline "General Surgery" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – exam

Abstract of the Syllabus

«Anesthesiology, resuscitation, intensive therapy»

Work load (credits/ academic hours)	3 credits /108 academic hours
Content	<p>Modern standard of monitoring and diagnostics, principles of using laboratory and instrumental methods of research in the specialty of anesthesiology and resuscitation to assess the safety of the patient.</p> <p>Modern trends and achievements in intensive care. Modern possibilities, methods of correction and prosthetics of vital functions of the organism in providing aid to patients in critical conditions of different etiology.</p> <p>Modern technologies, achievements in the field of anesthesiology, modern methods of protection of the body from surgical trauma during surgical interventions. Modern approaches to the treatment of pain syndrome.</p> <p>Modern advances in clinical pharmacology in the field of anesthesiology and resuscitation.</p>

Part of the curriculum	The discipline " Anesthesiology, resuscitation, intensive therapy" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Intermediate course of Surgery»

Work load (credits/ academic hours)	6 credits / 216 academic hours
Content	<p>History of Surgery. Acute surgical diseases of abdominal cavity organs. History of I.I. Grekov Department of Intermediate course of Surgery.</p> <p>Semiotics of surgical diseases of abdominal organs. Mechanisms of abdominal pain. Acute appendicitis. Atypical forms of acute appendicitis</p> <p>Complications of acute appendicitis. Biliary stone disease: chronic calculous cholecystitis. Complications of cholelithiasis. Mechanical jaundice: choledocholithiasis, cholangitis; differential diagnostics. Acute pancreatitis. Complications of acute pancreatitis. Peptic ulcer disease of the stomach and 12-rectum: anatomy, etiopathogenesis, clinic, diagnosis, surgical treatment. Surgical complications of peptic ulcer disease: perforation, penetration, pyloroduodenal stenosis, bleeding. Gastrointestinal bleeding: etiopathogenesis, differential diagnosis. Acute intestinal obstruction. Intestinal fistulas, colostomies, rehabilitation of colostomized patients. Peritonitis.</p> <p>Differential diagnosis of acute surgical diseases of abdominal cavity organs occurring in a typical form. Acute abdomen: differential diagnosis. Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal cavity organs and retroperitoneal space, occurring in a typical form. Hernias of the anterior abdominal wall: etiopathogenesis, clinic, diagnosis, treatment, complications. Diseases of the diaphragm.</p> <p>Surgical diseases of the esophagus. Chronic pancreatitis. Surgical diseases of the liver.</p> <p>Portal hypertension syndrome. Surgical diseases of the colon. Surgical diseases of the rectum. Abdominal trauma. Manipulations in the practice of abdominal surgeon.</p>
Part of the curriculum	The discipline "Intermediate course of Surgery" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study

Assessment	Formative assessment; Summative assessment – exam
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Abstract of the Syllabus
«Advanced course of Surgery»

Work load (credits/ academic hours)	10 credits / 360 academic hours
Content	Study of etiology, pathogenesis, clinic, diagnostics and differential diagnostics, principles of surgical tactics and surgical treatment of diseases of digestive organs, abdominal cavity and abdominal wall, chest organs, lungs, pleura and mediastinum, vessels, mammary gland, thyroid gland. Special attention is paid to atypical forms of the disease course, peculiarities of clinical manifestations, diagnostic search and therapeutic tactics in patients of different age groups.
Part of the curriculum	The discipline "Advanced course of Surgery " relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – exam

Abstract of the Syllabus
«Oncology»

Work load (credits/ academic hours)	3 credits/108 academic hours
Content	Modern problems of oncology. The structure of oncological service in Russia. Principles of treatment of malignant tumors. Lung cancer. Cancer of the esophagus. Cancer of the stomach. Cancer of the colon and rectum. Cancer of the breast. Tumors of the head and neck. Tumors of the skin. Cancer of the liver and pancreas.
Part of the curriculum	The discipline "Oncology" relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

**Abstract of the Syllabus
«Traumatology, orthopedics»**

Work load (credits/ academic hours)	5 credits/ 180 academic hours
Content	<p>The discipline contains basic information about the structure, biomechanics of the musculoskeletal system. General questions of the specialty traumatology and orthopedics. History. Injuries. Principles of the process of regeneration of the bone system. Pathophysiology of processes in bones and joints (including features of the formation of degenerative-dystrophic lesions)</p> <p>Highlights the issues of diagnosis and treatment of fractures of the upper, lower extremities, pelvis, spine</p> <p>It includes the study of the features of the development of degenerative-dystrophic processes in bones and joints, osteochondropathies, osteoporosis, neoplasms of bones and joints, deformities of limbs and spine, diagnostics and methods of their treatment.</p>
Part of the curriculum	The discipline "Traumatology, orthopedics " relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – exam

**Abstract of the Syllabus
«Medical rehabilitation»**

Work load (credits/ academic hours)	2 credit / 72academic hours
Content	<p>Regulatory law in medical rehabilitation. Evidence-based medicine in rehabilitation. The basic principles of application of therapeutic physical factors and exercises in rehabilitation. Physical methods of treatment of the main clinical syndromes. Electromagnet therapy. Phototherapy. Therapeutic application of factors of mechanical nature. Hydrothermotherapy. Fundamentals of therapeutic physical culture.</p> <p>Methods of therapeutic physical culture.</p> <p>Medical and pedagogical control over medical rehabilitation. Medical rehabilitation in neurological patients. Medical rehabilitation in diseases of internal organs. Medical rehabilitation in traumatology and surgery.</p>
Part of the curriculum	The discipline «Traumatology» relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory

	for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

**Abstract of the Syllabus
«Cardiology»**

Work load (credits/ academic hours)	2 credits / 72 academic hours
Content	Arterial hypertension. Clinic, diagnosis and treatment of different variants of the course of arterial hypertension. Symptomatic arterial hypertension. Atherosclerosis. Dyslipoproteidemia. Diagnostic methods. Treatment of atherosclerosis. Non-medication measures. Hypo-lipidemic drugs. Primary and secondary prevention. Myocardial diseases. Cardiomyopathies. Endocardial diseases. Ischemic heart disease. Modern clinical classification of IHD. Methods of diagnostics of IHD. Methods of treatment of ischemic heart disease. Acute coronary syndrome. ECG changes. Medication treatment. Indications for the use of invasive methods. Rhythm and conduction disorders. Extrasystoles. Atrial fibrillation and flutter. Pathogenesis, clinic, diagnostics. Methods of restoration of sinus rhythm. Secondary prevention. Ventricular tachycardias. Atrioventricular blockades. Circulatory insufficiency. Classifications of chronic cardiac insufficiency. Clinical variants of cardiac insufficiency. Treatment of chronic heart failure. Diseases of the aorta. Acute aortic syndrome. Aortic aneurysm. Genetic diseases of the aorta. Athero-sclerotic lesion of the aorta.
Part of the curriculum	The discipline «Cardiology» relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Endocrinology»

Work load (credits/ academic hours)	2 credits /72 academic hours
Content	<p>Section 1. Diabetes mellitus. Epidemiology, etiopathogenesis and medical and social significance of diabetes mellitus. Classification, clinic, diagnosis of diabetes, organization of diabetological care in the Russian Federation. Chronic complications of DM. Emergency conditions in diabetes mellitus. Treatment of DM (principles of diet therapy, oral sugar-reducing drugs, insulin therapy, self-control methods, personalized approach to therapy). Methods of prevention of DM, rehabilitation of patients.</p> <p>Section 2: Diseases of the thyroid gland, perithyroid glands. Thyroid diseases with thyroid-toxicosis syndrome, with hypothyroidism syndrome. Thyroid nodules, tactics of management. Iodine deficiency diseases. Diseases of perithyroid glands (hyperparathyroidism, hypoparathyroidism).</p> <p>Section 3. Diseases of the adrenal glands. Hypercorticism syndrome (Cushing's syndrome), hyperaldosteronism, pheochromocytoma. Incidentalomas of the adrenal glands. Arterial hypertension in adrenal pathology. Hypocorticism syndrome (acute and chronic adrenal insufficiency).</p> <p>Section 4: Pathology of hypothalamic-pituitary region. Pituitary adenomas (prolactinoma, somatotropinoma, corticotropinoma, pituitary incidentalomas). Hypopituitarism. Non-sugar diabetes.</p>
Part of the curriculum	The discipline «Traumatology» relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Nephrology»

Work load (credits/ academic hours)	2 credits /72 academic hours
Content	<p>Diagnostic algorithm of renal diseases in the case of pathology of urine sediment.</p> <p>Chronic kidney disease. Risk factors.</p> <p>Glomerular syndromes. Nephritic and nephrotic syndromes.</p> <p>Acute and chronic tubulointerstitial nephritis.</p> <p>The most common causes of acute injury of kidney, criteria of diagnosis.</p> <p>Diabetic nephropathy.</p>
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Rheumatology»

Work load (credits/ academic hours)	2 credits /72 academic hours
Content	<p>The working program of the discipline "Rheumatology" is aimed at obtaining theoretical knowledge, methods and study of advanced practical experience in diagnostic, therapeutic, rehabilitation and preventive activities in the field of rheumatology. After mastering the program the student forms practical skills of collecting complaints, anamnesis, objective examination, diagnostics, differential diagnosis and treatment of patients with rheumatic diseases, which will enable to perform their professional duties effectively and increase the efficiency of provision of quality medical care to therapeutic patients.</p> <p>1 section "Basics of social hygiene and organization of rheumatology service"</p> <p>2 section "Theoretical bases of rheumatology"</p> <p>3 section "Methods of diagnostics of rheumatic diseases"</p> <p>4 section "Basic means and methods of treatment of patients with rheumatic diseases"</p> <p>5 section "Rheumatic diseases". The main section in which the questions of diagnostics, differential diagnostics, treatment and prophylaxis of rheumatic diseases are covered in detail. Osteoporosis, rheumatic fever, rheumatoid, reactive, gouty arthritis, osteoarthritis, spondyloarthritis, vasculitis,</p>

	systemic lupus erythematosus, systemic scleroderma, Sjogren's disease
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Clinical guidelines in outpatient practice»

Work load (credits/ academic hours)	2 credits /72 academic hours
Content	<p>Draft law of the Russian Federation in the sphere of health protection, normative and legal acts and documents defining the operation of medical institutions.</p> <p>Constitution of the Russian Federation, Article 41.</p> <p>International Classification of Diseases.</p> <p>Standards of medical care and clinical recommendations in cardiology (ischemic heart disease, acute coronary syndrome, arterial hypertension, CVD), gastroenterology (GERD, NNC, chronic pancreatitis), pulmonology (BA, pneumonia, COPD), endocrinology (DM, hyperthyroidism, hypothyroidism), rheumatology (RA, SCD, OA, microcrystalline arthritis).</p> <p>Medical activities necessary for diagnosing a disease or condition (examination by a specialist, basic and specialized tests).</p> <p>Medical services for treatment of a disease, condition and treatment monitoring based on available clinical recommendations.</p>
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The discipline is compulsory for studies.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«General physical preparedness with elements of athletics»

Work load (credits/ academic hours)	328 academic hours
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Content	General physical training Special physical training Methodological and practical Preparation and implementation of regulatory requirements based on the regulatory requirements of the "Ready for labor and Defense" complex.
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The elective discipline.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus «Sports games»

Work load (credits/ academic hours)	328 academic hours
Content	General physical training Special physical training. Methodological and practical Preparation and implementation of regulatory requirements based on the regulatory requirements of the "Ready for labor and Defense" complex.
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The elective discipline.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus «Applied physical education and sport for students with disabilities and special educational needs»

Work load (credits/ academic hours)	328 academic hours
Content	A system of special knowledge, practical skills and abilities in the field of physical culture, for students with disabilities, ensuring the preservation and promotion of health, the formation of compensatory processes, correction of existing deviations in health, mental well-being, development and improvement of psychophysical abilities, the formation of professionally significant qualities and properties of personality.

Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The elective discipline.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Fundamentals of medical communication in English»

Work load (credits/ academic hours)	2 credits /72 academic hours
Content	<p>Communication in health care. Features of communication in the medical sphere. Verbal and non-verbal communication. The main barriers to effective communication in the medical sphere. Key models of interaction between doctor and patient. Calgary-Cambridge Guidelines for Medical Consultation. Basic structure of the consultation.</p> <p>Initial appointment. Initiation of the consultation. Preparation. Establishing initial contact with the patient. Clarification of the reason for contacting the doctor. Speech patterns for organizing the beginning of the consultation.</p> <p>Initial consultation. Information gathering. Communication skills for information gathering. Gathering complaints, life history and medical history from patients. Speech patterns for performing a physical examination of a patient.</p> <p>Initial consultation. Consultation structure and relationship building. Structuring the consultation, tracking the progress of the consultation. Using non-verbal communication techniques. Involvement of the patient in the communication process. Speech patterns for organizing a structured consultation and conducting effective communication with the patient.</p> <p>Initial consultation. Explanation and planning. Achieving the patient's understanding of the diagnosis and treatment. Discussion of treatment plan, shared decision making. Speech patterns for explaining the problem and planning the treatment plan.</p> <p>Initial appointment. Completion and planning. Speech patterns for effective completion of counseling. Behavioral aspect of the final stage of consultation.</p> <p>Primary consultation. Using basic communication skills in specific situations. Communicating bad news to the patient. Basic speech patterns for breaking bad news. The SPIKES model.</p> <p>Teleconsultation. Features of organization of remote format of communication in the medical sphere. Norms of ethical behavior in the digital format. Minimizing the risks of digital format of communication. Speech models of consultation in</p>

	<p>digital format.</p> <p>Communication in a team. Compliance with administrative subordination. Team interaction with subordinates. Correct, businesslike communication with junior and middle medical personnel. Speech models of non-conflict interaction with colleagues and the search for a compromise solution to the problem.</p> <p>Finding a compromise solution to a problem.</p> <p>Communication in scientific society. Communication in scientific society, its types. Formal and informal ties in the scientific society. Different types of academic writing. Written models of drafting a proposal for cooperation; application for participation in a conference, etc. Writing a review (summary) of a scientific article. Description of visual information (graphs, tables, histograms, etc.).</p> <p>International scientific conference. Submitting an application for participation in the conference. Interaction with the organizers of the conference. Preparation and presentation of the report at the international conference. Creating a presentation (stages). Presentation structure. Structure and content of the presentation in a foreign language. Speech patterns for presenting the results of scientific research. Visualization. Poster presentation.</p>
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The elective discipline.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Introduction into business correspondence in healthcare in English»

Work load (credits/ academic hours)	72 academic hours
Content	<p>Theoretical foundations of business correspondence in health care. Culture and etiquette of written communication. Language features of the official business style of written communication. Business correspondence in health care institutions. Types and varieties of internal and external business correspondence in health care. Purpose and functions of various types of letters. Rules of execution of simple and complex official letters: structure, use of etiquette forms and language models.</p> <p>Employment. Formalization of necessary documents: structure, rules, language models. Resume as a tool of business communication. Cover letter, application letter. Letter of rec-</p>

	<p>ommendation and its role in effective interaction.</p> <p>Letters of request. Purpose, main characteristics and drafting techniques.</p> <p>Letters containing a complaint or claim. Main characteristics and rules of drafting: structure, language models and templates used in this type of letters.</p> <p>Letters of apology. Purpose, main features and rules of drawing up.</p> <p>Medical business documentation. Form of reception of a patient. Referral for consultation of a specialist, examination, hospitalization. Medical history. Rules of registration, use of special terminology and abbreviations.</p> <p>Histologic conclusion. Purpose, rules of execution, use of abbreviations and special terminology.</p> <p>Description of graphic information in business correspondence. Description of charts, diagrams, tables, schemes. Examination cards. Pain rating scale. Wound assessment table. Diabetic chart. Use of the Katz index to assess the patient's dependence on external help.</p> <p>Medical business documentation. Protocols of surgical interventions. Discharge epicrisis.</p>
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The elective discipline.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Current issues of gastroenterology»

Work load (credits/ academic hours)	2 credits /72 academic hours
Content	<p>Mastering the discipline "Current issues of gastroenterology" involves familiarization of students with diseases of gastroenterological profile. The relevance of this pathology in the practice of a doctor of therapeutic area. Identification of the main symptoms and syndromes of diseases.</p> <p>Mastering the algorithms of examination and treatment of patients with these diseases in outpatient conditions. Differential diagnosis. Prevention, rehabilitation, check-up monitoring in diseases of gastroenterology profile.</p>
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty). The elective discipline.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment;

	Summative assessment – credit
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Abstract of the Syllabus
«Gastroenterology in outpatient practice»

Work load (credits/ academic hours)	2 credits /72 academic hours
Content	The discipline involves familiarization of students with the tactics of management of patients with gastroenterological profile. Identification of the main symptoms and syndromes of diseases. Mastering the algorithms of examination and treatment of patients with these diseases in outpatient settings. Differential diagnosis. Prevention, rehabilitation, dispensary observation in diseases of gastroenterological profile.
Part of the curriculum	The discipline relates to the compulsory part of the Unit 1 "Disciplines (modules)" of the basic professional educational pro-program on specialty 31.05.01 General Medicine (level of education - specialty). The elective discipline.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Communication with patients and colleagues in Russian»

Work load (credits/ academic hours)	2 credits /72 academic hours
Content	Study of vocabulary of the professional module, development of skills of use of this vocabulary, formation and development of communication skills in the future professional environment in certain situations of communication defined by the program in accordance with the norms of Russian speech etiquette.
Part of the curriculum	The discipline «Communication with patients and colleagues in Russian» is delivered at the 5th year. The discipline is elective
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Guidelines for writing a medical history in Russian»

Work load (credits/ academic hours)	2 credits / 72 academic hours
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Content	Studying the vocabulary of the professional module, studying the correlation of scientific and colloquial speech styles in a dialogue between a doctor and a patient, studying the standard language clichés used when questioning a patient by a doctor and writing a medical history in Russian, studying in Russian the typical complaints of a patient and names of symptoms associated with such diseases as bronchitis, angina pectoris, hypertension, gastritis and some others.
Part of the curriculum	The discipline «Guidelines for writing a medical history in Russian » is delivered at the 5th year. The discipline is elective
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

**Abstract of the Syllabus
«Fundamentals of clinical toxicology»**

Work load (credits/ academic hours)	3 credits/ 108 academic hours
Content	The aim of the discipline "Fundamentals of clinical toxicology" is the formation of the student's competences based on the understanding of acute poisonings of peacetime and wartime: the formation of a holistic understanding, readiness and ability to assess and take measures to provide medical care (up to specialised) to victims of toxicants of various origins, including hazardous chemical substances and chemical warfare agents; as well as the ability to diagnose and treat victims of toxicants.
Part of the curriculum	The discipline relates to the elective part of the basic professional educational program on specialty 31.05.01 General Medicine. The elective discipline.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

**Abstract of the Syllabus
«Patient-centered communication»**

Work load (credits/ academic hours)	5 credits / 180 academic hours
Content	The discipline continues to consider the communication skills of the physician, revealing the interaction of all participants of the treatment process, deepening the understanding of the communication in specific situations and developing the skills of communication with the particular categories of patients. The content of the discipline covers a range of issues related to the activities of the physician in the health care system as a

	<p>whole, considering building the dialogue with patients, higher authorities and staff of medical institutions.</p> <p>The second section of the discipline is focused on relations in physician-patient dyads, taking into account different categories of patients, their personality, diseases and social status.</p> <p>Special attention is paid to the prevention of conflict situations at all stages of mutual interaction between the treatment process participants.</p>
Part of the curriculum	The discipline «Patient-centered communication» relates to the elective part of the basic professional educational program on specialty 31.05.01 General Medicine.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – exam

Abstract of the Syllabus
«Organization of preventive health counselling»

Work load (credits/ academic hours)	3 credits/ 108 academic hours
Content	<p>Healthy lifestyle as a health provision. Aims, objectives and organization of medical and preventive work with the population in healthcare institutions.</p> <p>Check-up for the population. Issues of organization and efficiency assessment. Preventive health counselling during check-ups. Record-keeping on health check-ups and preventive work of the healthcare institutions. Comprehensive hygiene education as part of the population health promotion. “Health School” courses on main risk factors as a health-saving technology. Health monitoring, correction of treatment and prevention programs. Formation of environmentally sustainable human behavior as part of the preventive work with the population.</p>
Part of the curriculum	The discipline «Organization of preventive health counselling» relates to the elective part of the basic professional educational program on specialty 31.05.01 General Medicine.
Types of classes	Lectures, practicals, self-study
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Practical training: introductory»

Work load (credits/ academic hours)	3 credits/ 108 academic hours
Form of Practical training	educational

Type of Practical training	introductory
Part of the curriculum	Unit 2 «Practical training» Compulsory part
Aim	Consolidation and deepening of theoretical knowledge and formation of necessary skills in the chosen field of study
Types of classes	Practicals, self-study
Reporting	Report on practical training
Assessment	Formative assessment; Summative assessment – credit

Abstract of the Syllabus
«Practical training: clinical»

Work load (credits/ academic hours)	9 credits / 324 academic hours
Form of Practical training	educational
Type of Practical training	clinical
Part of the curriculum	Unit 2 «Practical training» Compulsory part
Aim	Consolidation and deepening of theoretical knowledge and formation of necessary skills in the chosen field of study
Types of classes	Practicals, self-study
Reporting	Report on practical training
Assessment	Formative assessment; Summative assessment – graded test

Abstract of the Syllabus
**«Internship on obtaining professional skills and experience
on positions of nursing staff»**

Work load (credits/ academic hours)	6 credits / 216 academic hours
Form of Practical training	internship
Type of Practical training	Internship on obtaining professional skills and experience on positions of nursing staff
Part of the curriculum	Unit 2 «Practical training» Compulsory part
Aim	Consolidation of theoretical knowledge, improvement of professional skills and formation of necessary practical skills in the chosen field of study
Types of classes	Practicals, self-study
Reporting	Report on practical training
Assessment	Formative assessment;

	Summative assessment – graded test
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Abstract of the Syllabus
«Internship in diagnostic profile»

Work load (credits/ academic hours)	6 credits / 216 academic hours
Form of Practical training	internship
Type of Practical training	Internship in diagnostic profile
Part of the curriculum	Internship in diagnostic profile relates to the compulsory part of the Unit 2 determined by the participants of educational process. Internship is compulsory.
Aim	The internship is aimed at consolidation and improvement of theoretical training knowledge, practical skills, skills acquisition in the use of medical equipment and instruments, gaining professional experience as an assistant doctor through direct participation in the hospital activities, as well as the development of practical knowledge and skills necessary for professional work.
Types of classes	Practicals, self-study
Reporting	Report on practical training
Assessment	Formative assessment; Summative assessment – graded test

Abstract of the Syllabus
«Internship in therapeutic profile»

Work load (credits/ academic hours)	12 credits/ 432 academic hours
Form of Practical training	internship
Type of Practical training	Internship in therapeutic profile
Part of the curriculum	Internship in therapeutic profile relates to the compulsory part of the Unit 2. Internship is compulsory.
Aim	The internship is aimed at consolidation and deepening of theoretical knowledge, the formation and enhancement of professional skills, the ability to apply them in practice, gaining professional experience as an assistant doctor through direct participation in the hospital activities, as well as the development of comprehensive professional competencies.
Types of classes	Practicals, self-study
Reporting	<ul style="list-style-type: none"> – individual assignment (Annex 1) – work schedule (plan) (Annex 2) – clinical history (Annex 3) – report on practical training (Annex 4) – letter of reference for student (Annex 5) – paper/summary (topics are given in Annex 6)

Assessment	Formative assessment; Summative assessment – graded test

Abstract of the Syllabus
«Internship in general medicine»

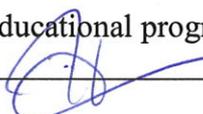
Work load (credits/ academic hours)	6 credits / 216 academic hours
Form of Practical training	Internship
Type of Practical training	Internship in general medicine
Part of the curriculum	Internship in general medicine relates to the compulsory part of the Unit 2 of the basic professional educational program on specialty 31.05.01 General Medicine (level of education - specialty)
Aim	Internship in general medicine is aimed at continuous and consistent professional skills development, ensuring readiness for its performance; consolidation and deepening of theoretical knowledge; formation of necessary professional skills and experience; consolidation and widening knowledge obtained at the departments of public health and therapy; department of infectious diseases; department of anesthesiology, resuscitation and intensive care; acquiring practical skills essential to the general practitioner; acquiring skills in diagnosis and emergency care at the pre-hospital stage in acute diseases and urgent conditions
Types of classes	Practicals, self-study
Reporting	Report on practical training
Assessment	Formative assessment; Summative assessment – graded test

Abstract of the Syllabus
«Internship on emergency medical manipulations»

Work load (credits/ academic hours)	3 credits/108 academic hours
Form of Practical training	Internship
Type of Practical training	Internship on emergency medical manipulations
Part of the curriculum	Internship on emergency medical manipulations relates to the compulsory part of the Unit 2 of the basic professional educational program on specialty 31.05.01 General Medicine (level

	of education - specialty)
Aim	Internship on emergency medical manipulations is aimed at developing students' ability and willingness to organize and provide urgent and emergency medical care to patients
Types of classes	Practicals, self-study
Reporting	Report on practical training
Assessment	Formative assessment; Summative assessment – graded test

Head of the Educational program of higher education

 / I.G. Bakulin /