Ministry of Science and Higher Education Ulyanovsk State University	Theform	
F-working program of discipline		

APPROVED

by the decision of the Scientific Council of the Institute nedicine, ecology and physical culture of USU 2021___, om "_12___ May ptocol No. B (V.I. Midlenko) airman 05 2021 11 12 M OF THE DISCIPLINE

Discipline	MEDICAL REHABILITATION
department	Medical
chair	Neurology, neurosurgery, physiotherapy and medical rehabilitation
Course	3

The direction/ specialty 31.05.01 "General Medicine"

Full-time form of education

Date of introduction of the program in the educational process of USU, "01" 09 2021 The program is actualized at a meeting of the department: the protocol number from 25 06 2022. The program is actualized at a meeting of the department: the protocol number from 20 52023 The program is actualized at a meeting of the department: the protocol number from 20 20 The program is actualized at a meeting of the department: the protocol number from 20 The program is actualized at a meeting of the department: the protocol number from 20 The program is actualized at a meeting of the department: the protocol number from 20 Informationaboutthedevelopers:

Fuliname	Chair	Position, academicdegree
Mashin Victor Vladimirovich	Neurology. neurosurgery, physiotherapy and medical rehabilitation	Head of the department, MD, professor
AyzatullinIldarFarisovich.	Neurology, neurosurgery, physictherapy and medical rehabilitation	Assistantofthedepartment

AGREED	AGREED		
Head of the Department, Neurology, neurosurgery, physiotherapy and medical rehabilitation realizing discipline	Head of the graduating department Hospital therapy		
/ Mashin VV / " 28 " 24 2021	11 2 har TVize-Chripunova M.A.		

Rehabilitation implementing the discipline	
/V. V. Mashin/	f(/Vize -Khripunova M. A./
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1. GOALS AND OBJECTIVES OF MASTERING THE DISCIPLINE: Goals of mastering the discipline: "Medical rehabilitation":

Promote the development of a doctor's professional competence in the field of medical rehabilitation through the formation of a holistic view of its current capabilities, based on an understanding of the structure and essence of the rehabilitation process.

Promote the acquisition of knowledge and skills necessary to solve professional problems **Tasks of mastering the discipline:**

- learn the basics of medical rehabilitation;
- study the principles of organization and operation of medical rehabilitation departments of medical institutions, medical rehabilitation centers, and health resorts;
- acquire knowledge and skills in the main methods of medical rehabilitation: physical therapy, physiotherapy;
- to study the basics of the following methods: reflexology, manual therapy, psychological rehabilitation, therapeutic nutrition;
- acquire knowledge and skills in evaluating the effectiveness of medical rehabilitation methods;
- master the rules for completing medical documentation;
- to acquire knowledge and skills in drawing up individual programs of medical rehabilitation at the inpatient, polyclinic, sanatorium resort stages of medical rehabilitation for patients with the main types of pathologies;
- acquire knowledge and skills in the organization and operation of a multidisciplinary team in the conditions of the department and medical rehabilitation center;
- acquire knowledge and skills on medical supervision in medical rehabilitation;
- to form students ' readiness to use the acquired knowledge in their professional activities;

2. PLACE OF THE DISCIPLINE IN THE STRUCTURE OF OPOP:

2.1 The discipline "Medical rehabilitation" belongs to the Block "Variable disciplines" of the mandatory variable part of the main professional educational program of higher education in the specialty "31.05.01. Medical business", developed in accordance with the Federal State Educational Standard of Higher Education (FSES HE) for training highly qualified personnel, approved by the orderMinistry of Education and Science Russian Federation No. 95 of "9" February 2016..

2.2.Requirements for the student's entrance knowledge, skills and competencies required for its study;

Physics and mathematics. Medical informatics. Medical Biophysics Know:

Fundamentals of the use of physical factors for diagnosis and treatment: ultrasound, sound, electromagnetic waves, radionuclides, ionizing radiation.

Physical parameters that characterize the functional state of organs and tissues: mechanical,

electrical, electromagnetic, optical.

Physical phenomena and processes underlying the vital activity of the body and their characteristics.

The most general biophysical patterns underlying the processes occurring in the body. Physical and chemical properties of biological tissues.

The main characteristics of factors affecting the body, biophysical mechanisms of such impact. Physical and chemical essence of the processes occurring in a living organism at the molecular, cellular, tissue and organ levels.

Functional systems of the human body, their regulation and self-regulation when exposed to the external environment in normal and pathological conditions.

Mathematical methods of solving intellectual tasks and their application in medicine; the theoretical basis informatyki, collection, storage, retrieval, processing, transformation, and dissemination of information in medical and biological systems, the use of computer information systems in medicine and health; principles of operation and the device of the equipment used in medicine, the foundations of physical and mathematical laws that receives the mapping in medicine.

Be able to:

use educational, scientific, popular science literature, the Internet for professional activities, work with equipment in accordance with safety regulations.

Biochemistry.

As a result of mastering the discipline, the student should: Know:

structure and biochemical properties of the main classes of biologically important compounds: proteins, nucleic acids, carbohydrates, lipids, vitamins;

main metabolic pathways of their transformation; enzymatic catalysis; basics of bioenergetics; the role of cell membranes and their transport systems in metabolism in the human body;

chemical and biological essence of processes occurring at the molecular and cellular levels in the human body;

basic mechanisms of regulation of metabolic transformations of proteins, nucleic acids, carbohydrates, lipids;

Be able to:

use educational, scientific, popular science literature, and the Internet for professional activities; perform test tasks in any form, solve situational problems based on theoretical knowledge. Own:

basic technologies of information transformation: text and table editors; techniques of working on the Internet for professional activities;

medical and functional conceptual apparatus.

Anatomy.

As a result of mastering the discipline, the student should: Know:

fundamentals of anatomical terminology in Russian and Latin equivalents; general laws of the structure of the human body, structural and functional relationships of parts of the body;

anatomical and topographical relationships of organs and parts of the body in adults, children and adolescents;

basic details of the structure and topography of organs, their systems, and their main functions in different age periods;

possible variants of the structure, main anomalies and malformations of organs and their systems; Be able to:

find and probe the main bone and muscle landmarks on the body of a living person, apply a projection of the main vascular-nerve bundles of areas of the human body; correctly name and

demonstrate movements in the joints of the human body; use scientific literature;

show organs, their parts and structural details in images obtained by various imaging methods (X-rays, computer and magnetic resonance imaging, etc.) строения

Own:

basic technologies of information transformation: independent work with educational literature on paper and electronic media, online resources on human anatomy.

Normal physiology.

As a result of mastering the discipline, the student should: Know:

basic properties and conditions of excitable tissues, mechanisms of bioelectric phenomena; structural and functional properties and features of regulation of the processes of contraction of striated and smooth muscles;

the role of various departments and structures of the central nervous system in the regulation of somatic and visceral functions of the body. Reflex arcs with visceral and somatic components; individual features of the organization and reflex activity of the autonomic nervous system, its participation in the formation of holistic behaviors;

mechanisms of functioning and principles of regulation of endocrine cells, endocrine glands and features of their interaction in conditions of purposeful behavior and pathology;

the blood system and its role in maintaining and regulating the body's homeostatic constants, blood functions, characteristics and functional features of physiological blood constants;

the main stages and indicators of the function of external respiration, the respiratory center and its structure, features of respiratory regulation under various loads;

the role of proteins, fats, carbohydrates, minerals, vitamins and water in ensuring the vital activity of the body;

physiological features of the regulation of metabolism and energy in the body under the influence of extreme environmental factors and professional activity; features and patterns of structural and functional organization of the functions of the gastrointestinal tract;

main stages of urine formation and mechanisms of their regulation; main mechanisms of regulation of heart activity, cardiac cycle;

physiological role of vascular system divisions, linear and volumetric velocity

blood flow, neurohormonal mechanisms of regulation of vascular tone and systemic hemodynamics;

features of the structural and functional organization of the microcirculatory bed of various regions of the body of a healthy person, transcapillary metabolism and its regulation; the main morpho-functional features of the organization of various departments of sensory systems;

mechanisms of conditioned reflex formation and its inhibition, role in clinical practice, components of the functional system of a behavioral act;

the concept and classification of pain;

features of morpho-functional organization of nociceptive and antinociceptive systems; mechanisms and features of the formation of the main functional systems of the body (maintaining a constant level of nutrients in the blood, blood pressure, temperature of the internal environment, preserving the integrity of the body, etc.).

Be able to:

use knowledge about:

methodological approaches (analytical and systematic) for understanding the patterns of activity of an integral organism;

theory of functional systems for understanding the mechanisms of self-regulation of homeostasis and the formation of useful results in adaptive activity;

properties and functions of various body systems in the analysis of patterns of formation of

functional systems of the body of a healthy person; mechanisms of formation of specific and integrative functions;

Own methods:

assessment of the influence of environmental factors based on changes in the functional state of the body.

evaluation of the results of a general blood test; evaluation of the results of a general urinalysis; palpation of the pulse;

blood pressure measurements.

Pathological anatomy.

As a result of mastering the discipline, the student should: Know:

basic laws of development and vital activity of the human body based on the structural organization of cells, tissues and organs; histofunctional features of tissue elements; methods of their research, sexual and individual features of the structure and development of the human body;

concepts of etiology, pathogenesis, morphogenesis, pathomorphosis of the disease, principles of classification of diseases; basic concepts of general nosology;

functional systems of the human body, their regulation and self-regulation when exposed to the external environment in normal and pathological processes; structure and functions of the immune system, its age-related features, mechanisms

development and functioning, basic methods of immunodiagnostics, methods for assessing the immune status and indications for the use of immunotropic therapy;

Be able to:substantiate the nature of the pathological process and its clinical manifestations, the principles of pathogenetic therapy of the most common diseases,

Pathophysiology.

As a result of mastering the discipline, the student should: Know:

functional systems of the human body, their regulation and self-regulation in interaction with the external environment in normal and pathological processes; substantiate the nature of the pathological process and its clinical manifestations; principles of pathogenetic therapy of the most common diseases.

Be able to:

substantiate the nature of the pathological process and its clinical manifestations, the principles of pathogenetic therapy of the most common diseases.

Propaedeutics of internal diseases.

As a result of mastering the discipline, the student must:: Know:

etiology, pathogenesis, diagnosis, treatment of major diseases of internal organs that occur in a typical classical form

Be able to:

identify causal relationships between the development of the disease, prescribe etiopathogenetictreatment;

recognize the manifestations of the disease in a particular patient with impaired function of various organs and systems.

Own:

a method of collecting a medical history of the disease and a life history with the identification of risk factors for this disease

Physical education.

Know:

principles of healthy lifestyle and physical development in rehabilitationBe ableto: apply methods of physical culture to improve the level of health, performance and well-being.

2.3 Disciplines for which this discipline is the previous one:

- hospital therapy;
- outpatient and emergency treatment;
- hospital surgery;
- obstetrics and gynecology;
- traumatology and orthopedics;
- neurology;
- endocrinology;
- pediatrics.

3. LIST OF PLANNEDRESULTS OF TRAINING IN THE DISCIPLINE, CORRELATED WITH THE PLANNED RESULTS OF MASTERING THE MAIN PROFESSIONAL EDUCATIONAL PROGRAM

Code and name of the	List of planned results of training in the discipline (module)
implemented competence	correlated with indicators of achievement
of PC-4 competenciesreadiness to	Know: With the benefits of drug administration in patients wi various diseases in need of medical rehabilitation and s
determine the need for the use	treatment.
of natural therapeutic factors, drug, non-drug therapy and other methods in patients in need of medical rehabilitation	Be able to: ITUse different methods of drug administration in patients with various diseases who need medical rehabilitation and spa treatment.
and spa treatment	Master: The skillsof using different methods of dr administration in sanatorium-resort conditions in patients in ne of medical rehabilitation and sanatorium-resort treatment.
PC-5	to Know: the technique of wet cleaning, ventilation chambers.
Ability and willingness to	equipment, current and final disinfection; methods and
implement the set of measures	techniques for sanitary treatment of patients in the emergency
aimed at preserving and	Department; - the method of treatment of patients with

prevent and (or) the spread of diseases, their early diagnosis,	pediculosis; the method of anthropometry; dietary tables and their significance in therapeutic measures for the recovery of patients; the method of measuring blood pressure; the method of studying the pulse on the arteries and its properties; the method of counting respiratory movements.
and development, as well as to eliminate the harmful effects o	Be able to: perform wet cleaning of wards, current and final disinfection; perform sanitary treatment of the patient in the emergency department; perform anthropometry; count respiratory movements and evaluate the result; measure blood pressure; examine the pulse on the arteries and evaluate the result.
	Possess: techniques of wet cleaning of wards, current and fina disinfection; methods of sanitary treatment of patients in the emergency department; methods of anthropometry; methods of counting respiratory movement methods of measuring blood pressure; methods of studying pulse on the arteries.

4. GENERAL LABOR INTENSITY OF THE DISCIPLINE

4.1. Scope of the discipline in credit units (total) 2

4.2. Scope of the discipline by type of academic work (in hours)72

	Number of hours (<u>form of training</u> <u>full-time course</u>)			
Type of academic work	Total according to	B Incl.by semester		
	Total according to the plan	5		
1	2	3		
Contact work of students with the teacher in accordance with UP	54	54		
Classroom sessions:	54	54		
lectures				
Seminars and practical exercises	54	54		

laboratory work, workshops		-
Independent work	18	18
Form of current knowledge control and independent work control: testing, counter. work, colloquium, abstract, etc.(at least 2 types)	testing, situational tasks, abstract	testing, situational tasks, abstract
Course work		-
Types of intermediate certification	offsetting	offsetting
(exam, credit)		
Total hours in the discipline	72	72

4.3. Content of the discipline (module.) Distribution of hours by topic and type of academic work:

Form of study______full-time

	about	Тур	Current				
Name of sections and topics		about	Clas All Lecture Center	SSROOM act Practical classes, and seminars	ivities Laboratory Laboratory work, practice	Employment activitiesin Active classesnter asset in the	Independent work
1	2	3	4	5	new form	7	
-		-	=	-	6 Methods and 1	-	مما
rehabili		amentais	of medical	renabilitation	Ivietnous and	means of mean	Cal
Topic 1. Fundamentals of medical rehabilitation. Basics of physical therapy	8	0	6		-	2	Test tasks. Survey. Defending a report (abstract) Evaluating the performance of the project implementati on th of a practical skill or solving situational tasks
Topic 2.2.1 . 2.1	8	0	6		-	2	Test tasks. Survey.

Electrother apy. 2. 2 Magnetic therapy						Defending a report (abstract) Evaluating the performance of a practical skill or solving a situational problem. situational tasks
Topic 3.8 3.1 Photothera py 3.2 Therapeuti c use factors of mechanical factors nature. 3.3 Hydrothera py. 3.4 Thermothe rapy.	8	0	6		2	Test tasks. Survey. Protection of the report (abstract) Assessment of the implementatio n of practical skill performance or situational situational problem solving
Topic 4.4.1 4.1 Kurortnaya therapy. 4.2 Medical rehabilitati on in the structure of health- resort care. 4.3 Manual therapy. 4.4 Therapeutic nutrition.	8	0	6		2	Test tasks. Survey. Defending a report (abstract) Evaluating the performance of a practical skill or solving situational tasks

Topic 5.5.1 5.1 I'm a reflexologist. 5.2 Psychological I'm in rehab. 5.3 Medical supervision in medical rehabilitation.	8		6		-	2	Test tasks. Survey. Defending a report (abstract) Evaluating the performance of a practical skill or solving a situational problem. situational tasks
Topic 6.5.1 Physical therapy. 5.2 Health - improving methods 5.3 Rehabilitation of disabled people.	8		6	-	-	2	Test tasks. Survey. Protection of the report (abstract) Assessment of a completed practical skill or solving situational problems
Section 2. Me	edical r	ehabilitati	on in clinica	l practice.			
Topic 7.7.1 7.1 Medical ияrehabilitation in cardiology. 7.2 Medical ияrehabilitation in pulmonology Topic 8.8.1	8		6		-	2	Test tasks. Survey. Protection of the report (abstract) Assessment of the implementation of a practical skill or solving situational tasks
8.1 Medical ияrehabilitation in rehabilitation in gastroenterology and endocrinology 8.2 Medical rehabilitation in oncology.						-	

 8.3 Medical rehabilitation for infectious diseases. 8.4 Medical rehabilitation in neurology. 						
Topic 9.8 9.1 Medical rehabilitation in traumatology and orthopedics. 9. 2Medical rehabilitation in surgery. 9. 3 Medical rehabilitation in auscherism and gynecology. 9. 4Medical rehabilitation in pediatrics	8		6	 _	2	Test tasks. Survey. Defending a report (abstract) Evaluating the implementation of a practical skill or solving situational situationaltasks
Total:	72	0	54	 -	18	

Interactive forms of conducting classes

n/ a number	Name раздела of the discipline section	Interactive forms of conducting classes	Duration (hour)
1.	Section 1. Fundamentals of medical rehabilitation. Methods and means of medical rehabilitation. Topics: # 1 - # 6	Work in small groups when solving situational problems. Working in small groups: "Patient-physiotherapist" "Patient - doctor of physical therapy "	3
2	Section 2. Medical rehabilitation in clinical practice. Topics: #7-8	Work in small groups when solving situational problems. Working in small groups: "Patient-multidisciplinary team	3
ТОТ	AL	6	

5. CONTENT OF THE DISCIPLINE (MODULE) MEDICAL REHABILITATION

Section 1.Fundamentals of medical rehabilitation. Methods and means of medical rehabilitation.

- Topic 1.
- **1.1** Fundamentals of medical rehabilitation.

1.2 Fundamentals of physical therapy. Content of the topic.

1.1. Fundamentals of medical rehabilitation.

- 1.1.1. Basic concepts
- 1.1.1.1. Scientific background
- 1.1.1.2. Medical rehabilitation as a clinical specialty
- 1.1.1.3. Medical rehabilitation as an academic discipline
- 1.1.2. History of the development of the doctrine of medical rehabilitation
- 1.1.3. Methodological foundations of medical rehabilitation
- 1.1.3.1. Basic principles
- 1.1.3.2. Evidence-based medicine and rehabilitation
- 1.1.3.3. Innovative rehabilitation technologies
- 1.1.4. Organization of medical rehabilitation

1.2. Fundamentals of physical therapy.

- 1.2.1 Main provisions. Basic concepts in physical therapy.
- 1.2.2 Basic principles of therapeutic use of physical factors.

Topic 2.

- 2.1 Electrotherapy.
- 2.2 Magnetictherapy.

Content of the topic.

2.1 Electrotherapy.

- 2.1.1. Direct current electrotherapy
- 2.1.2. Pulsed electrotherapy
- 2.1.3. Low-frequency electrotherapy
- 2.1.4. Mid -frequency electrotherapy
- 2.1.5. Ultra -high frequency therapy
- 2.1.6 Ultrahigh frequency electrotherapy

2.2.7. Extremely high-frequency therapy

2.2. *Magnetictherapy.*

- 2.2.1 Transcerebral magnetic therapy
- 2.2.2 Low-frequency magnetic therapy
- 2.2.3 High-frequency magnetic therapy

Topic 3.

Content of the topic.

3.1 Phototherapy.

- 3.1.1 Infrared radiation.
- 3.1.2 Chromotherapy.
- 3.1.3 Ultraviolet radiation.
- 3.1.4 Laser therapy.

3.2 Therapeutic use of mechanical factors .

3.2.1 Therapeutic massage.

3.2.2 Traction therapy.

- 3.2.3 Vibrotherapy.
- 3.2.4 Remote shock-wave therapy.
- 3.2.5 Therapeutic use of ultrasound.
- 3.2.6 Aeroionotherapy.
- 3.2.7 Aerosoltherapy.
- 3.2.8 Haloaerosol therapy.
- 3.2.9 Aerial phytotherapy.

3.3 Hydrotherapy.

- 3.3.1 Souls
- 3.3.2 Baths
- 3.3.3 Colonohydrotherapy
- 3.3.4 Baths

3.4 Thermotherapy

- 3.4.1 Heat therapy.
- 3.4.2 Cryotherapy.

Topic 4.

- 4.1 Spa therapy.
- 4.2 Medical rehabilitation in the structure of sanatorium-resort care.
- 4.3 Manual therapy.

4.5 Therapeutic nutrition. Content of the topic.

4.1 Spa therapy.

- 4.1.1 Climatotherapy
- 4.1.2 Balneotherapy
- 4.1.3 Peloidotherapy.

4.2 Medical rehabilitation in the structure of sanatorium-resort care.

- 4.2.1 Spa treatment.
- 4.2.2 Medical rehabilitation in resorts

4.3 Manual therapy.

4.3.1. Basic concepts and principles of manual therapy.

4.3.2 Methods of manual therapy.

4.4 Therapeutic nutrition

- 4.4.1 Basics of therapeutic nutrition
- 4.4.2 Assessment of the nutritional status and determination of the need for nutritional support.
- 4.4.3 Therapeutic nutrition in medical rehabilitation programs.

Topic 5.

- 5.1 Reflexology.
- 5.2 Psychological rehabilitation.
- 5.3 Medical supervision in medical rehabilitation. Content of the topic.

5.1 Reflexology.

- 5.1.1 Basic concepts and principles.
- 5.1.2 Методы Reflexology methods
- 5.2 Psychological rehabilitation.
- 5.2.1 Basic concepts and principles

- 5.2.2 Methods of psychological rehabilitation.
- 5.2.3 Traditional methods
- 5.3 Medical supervision in medical rehabilitation.
- 5.3.1 Basic concepts and principles.
- 5.3.2 Types of medical supervision
- 5.3.3 Methods for assessing the initial level of patient adaptation reserves.
- 5.3.4 Standard assessment scales for integral assessment of the patient's condition

Topic 6.

- 6.1 Therapeutic physical culture (physical therapy).
- 6.2 Wellness methods
- 6.3 Rehabilitation of disabled people. Content of the topic.

6.1 Therapeutic physical culture (physical therapy).

- 6.1.1 Basic provisions and principles of physical therapy. 6.1.1.1.Basic concepts
- 6.1.1.2 Principles of therapeutic use of physical exercises
- 6.1.2 Methods of therapeutic physical culture.
- 6.1.2.1 Kinesitherapy.
- 6.1.2.1.1 Therapeutic gymnastics
- 6.1.2.1.2 Morning exercises
- 6.1.2.1.3 Therapeutic motor mode
- 6.1.2.1.4 Other forms of kinesitherapy
- 6.1.3 Therapeutic walking
- 6.1.4 Mechanokinesitherapy
- 6.1.5 Bio -controlled mechanokinesitherapy
- 6.1.6 Hydrokinesitherapy
- 6.1.7 Robotic mechanotherapy
- 6.1.8 Occupational Therapy
- 6.1.9 Sports exercises
- 6.1.10 Orthotic therapy

6.2 Wellness methods

- 6.2.1 Health assessment здоровья
- 6.2.2 Wellness training sessions
- 6.2.3 Health-improving physical methods

6.3 Rehabilitation of disabled people.

- 6.3.1 Fundamentals of rehabilitation assistance for disabled people
- 6.3.2 Individual rehabilitation program
- 6.3.3 Technical means of rehabilitation.

Topic 7.

7.1 Medical rehabilitation in cardiology.

7.2 Medical rehabilitation in pulmonology. Content of the topic.

7.1 Medical rehabilitation in cardiology.

- 7.1.1 Myocardial infarction
- 7.1.2 Coronary heart disease
- 7.1.3 Condition after реваскуляризации myocardial revascularization

7.2 Medical rehabilitation in pulmonology.

- 7.2.1 Pneumonia
- 7.2.2 Chronic obstructive болезнь pulmonary disease
- 7.2.3 Bronchial asthma

Topic 8.

- 8.1 Medical rehabilitation in gastroenterology and endocrinology.
- 8.2 Medical rehabilitation in oncology.
- 8.3 Medical rehabilitation for infectious diseases.
- 8.4 Medical rehabilitation in neurology. Content of the topic.

8.1 Medical rehabilitation in gastroenterology and endocrinology.

- 8.1.1 Diseases of the operated stomach and gallbladder пузыря
- 8.1.2 Diabetes mellitus

8.2 Medical rehabilitation in oncology.

- 8.2.1 Main provisions and principles
- 8.3 Medical rehabilitation for infectious diseases.
- 8.3.1 Viral hepatitis
- 8.3.2 Tuberculosis

8.4 Medical rehabilitation in neurology.

- 7.5.1 Acute cerebrovascular accident кровообращения
- 7.5.2 Vertebrogenic diseases of the peripheral nervous system

Topic 9.

- 9.1 Medical rehabilitation in traumatology and orthopedics.
- 9.2 Medical rehabilitation in surgery.
- 9.3 Medical rehabilitation in auscherism and gynecology.
- 9.4 Medical rehabilitation in pediatrics Topic content.

9.1 Medical rehabilitation in traumatology and orthopedics.

- 9.1.1 Fundamentals of medical rehabilitation in traumatology and orthopedics
- 9.1.2 Post-traumatic and postoperative syndromes .

9.1.3. Features of rehabilitation in conservative and operative methods of treating injuries and deformities of the musculoskeletal system.

9.2 Medical rehabilitation in surgery.

- 9.2.1 Pathophysiological features of surgical trauma.
- 9.2.2 Medical rehabilitation for lung surgery
- 9.2.3 Medical rehabilitation during operations on the abdominal organs

9.3 Medical rehabilitation in auscherism and gynecology.

- 9.3.1 Pregnancy with extragenital and obstetric pathology
- 9.3.2 Inflammatory diseases of the female genital organs..

9.4 Medical rehabilitation in pediatrics.

9.4.1 Features of medical rehabilitation of children with deformities of the musculoskeletal system, flat feet, diseases of the respiratory system, gastrointestinal tract, kidney diseases.

9.4.2 Age-related terms of prescribing physical methods of treatment.

6. PRACTICAL TRAINING TOPICS

Section 1. Fundamentals of medical rehabilitation. Methods and means of medical rehabilitation.

Topic 1.

1.1 Fundamentals of medical rehabilitation.

1.2 Fundamentals of physical therapy.

(The form of conducting is a practical lesson).

Questions on the topics of the section (for discussion in class, for self-study).

1.1. Fundamentals of medical rehabilitation (MR).

1.1.1. Basic concepts

1.1.1.1. Scientific background

1.1.1.2. Medical rehabilitation as a clinical specialty

1.1.1.3. Medical rehabilitation as an academic discipline

1.1.2. History of the development of the doctrine of medical rehabilitation

1.1.3. Methodological foundations of medical rehabilitation

1.1.3.1. Basic principles

1.1.3.2. Evidence-based medicine and rehabilitation

1.1.3.3. Innovative rehabilitation technologies

1.1.4. Organization of medical rehabilitation

1.1.4.1 Legal basis and features of the organization of medical rehabilitation in the Russian Federation: Federal Law No. 323-FZ of 21.11.2011 "On the basics of protecting the health of citizens of the Russian Federation" Article 40.

Pr-z of the Ministry of Health of the Russian Federation No. 1705n dated 29.12.2012. "On the procedure for providing medical rehabilitation" (in outpatient settings, in a day hospital, in hospitals).

Order of the Ministry of Labor of the Russian Federation No. 572n of 03.09.2018 "On approval of the professional standard "Specialist in Medical Rehabilitation"

1.1.4.2 Basic provisions of medical, social and professional rehabilitation.

1.1.4.3 Structure of the department of medical rehabilitation in a polyclinic, hospital, rehabilitation center, sanatorium-resort complex.

1.1.4.4 Stages of medical rehabilitation.

1.1.4.5 Modern concept of the consequences of the disease on three levels.

1.1.4.6 International Classification of Functioning (ICF), Disability and Health (WHO, 2007) and its significance in medical rehabilitation

1.1.4.7 Patient's vital activity criteria and their evaluation parameters.

1.1.4.8 The concept of disability.

1.1.4.9 Rehabilitation diagnosis, rehabilitation potential, and rehabilitation prognosis. Individual rehabilitation program (IPR). Definition of the concept, goals, and principles of implementing the IPR.

1.1.4.10 Methodological approaches to the preparation of IPR for patients and disabled people: the formation of a rehabilitation program, a comprehensive drug and non-drug technologies: physical therapy, physical therapy, massage, therapeutic and preventive nutrition, manual therapy and psychotherapy, reflexology and methods with the use of natural healing factors, and means, adapting the environment to the functional capabilities of the patient and (or) functional classes with Helicobacter pylori the ability of the patient to the environment, including through the use of mobility AIDS, prosthetics and orthotics.

1.1.4.11 Algorithms for drawing up an IPR and conducting medical rehabilitation: diagnosis of

the patient's clinical condition; formation of the goal of conducting the IPR.

assessment of risk factors for carrying out rehabilitation measures; factors limiting the implementation of rehabilitation measures; morphological parameters; functional reserves of the body; the state of higher mental functions and the emotional sphere; violation of household and professional skills; restrictions on activity and participation in significant events of private and public life for the patient; environmental factors affecting the outcome

rehabilitation process, the purpose of funds and methods

1.1.4.12 Organization and specifics of the work of a multidisciplinary team.

1.1.4.13 Routing of patients during medical rehabilitation.

1.1.4.13 Methods for evaluating the effectiveness of medical rehabilitation. Activity scales used in medical rehabilitation.

1.1.4.14 Contraindications to rehabilitation measures

1.2. Fundamentals of physical therapy.

- 1.2.1 The main provisions in physical therapy.
- 1.2.1.1 Basic concepts in physical therapy.
- 1.2.1.1.1 Physical therapy.

1.2.1.1.2 Categories of physical therapy: therapeutic physical factors, physical method treatment options. Method of physiotherapy procedure.

- 1.2.1.1.3 Subject of study
- 1.2.1.1.4 Physical methods
- 1.2.1.1.5 Laws of physical therapy
- 1.2.1.2 . Basic principles of therapeutic use of physical factors.
- 1.2.1.2.1 The principle of unity of syndromic-pathogenetic and clinical-functional

approaches.

- 1.2.1.2.2 The principle of individual treatment by physical factors.
- 1.2.1.2.3 The principle of course treatment by physical factors.
- 1.2.1.2.4 The principle of optimal treatment by physical factors.
- 1.2.1.2.5 The principle of complex treatment by physical factors.
- 1.2.1.2.6 The principle of dynamic treatment by physical factors.
- 1.2.1.3 General contraindications for physical therapy.

Topic 2.

2.1 Electrotherapy.

2.2 Magnetictherapy.

(The form of conducting is a practical lesson).

Questions on the topics of the section (for discussion in class, for self-study)

2.1 Electrotherapy. Therapeutic effect. Therapeutic effects. Indications. Contraindications. Parameters.

2.1.1. Direct current electrotherapy: electroplating, medicinal electrophoresis

2.1.2 Central impact pulsed electrotherapy: electrocontherapy, transcranial electrical stimulation

2.1.3. Pulsed peripheral electrotherapy: diadinamotherapy, short-pulse electroanalgesia электроаналгезия.

2.1.4. Low-frequency electrotherapy: amplipulsetherapy, myoelectric stimulation, interference therapy

2.1.5 Mid-frequency electrotherapy: local darsonvalization, ultra-tonotherapy

2.1.6 Ultra -high frequency therapy

- 2.1.7 Ultrahigh-frequency electrotherapy: decimeter-wave therapy (DMV-therapy),
- centimeter-wave therapy (SMV-therapy), extremely high-frequency therapy (EHF-therapy).

2.2 Magnetictherapy. Therapeutic effect. Therapeutic effects. Indications. Contraindications.

Parameters.

- 2.2.1. Transcerebral magnetic therapy.
- 2.2.2. Pulsed magnetic therapy.
- 2.2.3 Low-frequency magnetic therapy: alternating low-frequency electromagnetic field
- (PeMP), pulsating (PuMP) of the magnetic field.
- 2.2.4 High-frequency magnetic fields (MF)

Topic 3.

- 3.1 Phototherapy
- **3.2** Therapeutic use of mechanical factors .
- 3.3 Hydrotherapy.
- **3.4** Thermotherapy.

The form of conducting is a practical lesson.

Questions on the topics of the section (for discussion in class, for self-study)

- **3.1** Phototherapy.
- **3.2** Therapeutic effect. Therapeutic effects. Indications. Contraindications. Parameters.
- 3.2.1 Infrared radiation.
- 3.2.2 Chromotherapy.
- 3.2.3 Ultraviolet radiation: Long-, Medium-and Short-wave radio equipment. Irradiation of blood with a short-wave spectrum of ultraviolet radiation (autotransfusion of irradiated blood-AUFOC).
- 3.2.4 Laser radiation: red and infrared. Intravenous laser irradiation of blood. (ВЛОК).

3.3 Therapeutic use of mechanical factors.

- **3.4** Therapeutic effect. Therapeutic effects. Indications. Contraindications. Parameters.
- 3.4.1 Therapeutic massage.
- 3.2.2. Traction therapy.
- 3.2.3 Vibrotherapy.
- 3.2.4 Remote shock-wave therapy.
- 3.2.5 Therapeutic use of ultrasound.
- 3.2.6 Medicinal ultraphonophoresis.
- 3.2.7 Aeroionotherapy.
- 3.2.8 Aerosoltherapy. Modern equipment. Medicinal substances used for aerosoltherapy.
- 3.2.9 Haloaerosoltherapy.
- 3.2.10 Aerial phytotherapy.
- **3.5 Hydrotherapy.** Therapeutic effect. Therapeutic effects. Indications. Contraindications. Parameters.
- 3.5.1 Showers: low, medium and high pressure; indifferent, warm and hot showers, contrast showers, underwater massage showers.
- 3.5.2 Baths: fresh baths (warm, cold), contrast baths. Aromatic baths. Gas baths.
- 3.5.3 Colonohydrotherapy.
- 3.5.4 Baths: steam bath, dry-air bath (sauna).
- **3.6** Thermotherapy.
- **3.7** Therapeutic effect. Therapeutic effects. Indications. Contraindications. Parameters.
- 3.7.1 Heat therapy: paraffin- ozokeritolechenie.

3.7.2 Cryotherapy: water-containing cryoagents: ice cubes, cryopackages, cryoapplicators, hypo-thermal thermalpads; cold metal junction of thermoelectric contact devices, gases or mixtures thereof (chloroethyl, carbon dioxide, nitrogen and air), cold pencils. General cryotherapy (extreme cryotherapy).

Topic 4.

- 4.1 Spa therapy.
- 4.2 Medical rehabilitation in the structure of sanatorium-resort care.
- 4.3 Manual therapy.
- 4.4 Therapeutic nutrition.

The form of conducting is a practical lesson.

Questions on the topics of the section (for discussion in class, for self-study)

4.1 Spa therapy.

4.2 Therapeutic effects. Indications.Contraindications. Parameters.

4.2.1 Climatotherapy: aerotherapy, speleotherapy, airbaths, heliotherapy, thalassotherapy.

4.2.2 Balneotherapy.. Mineral waters for external use: sodium chloride baths, iodinebromine baths, mineral-gas baths, carbon dioxide baths, hydrogen sulfide baths, radon baths. Drinking mineral waters: total mineralization, ionic composition and presence of biologically active components, natural table, medicinal table and medicinal mineral waters. Chemical composition and physical properties of mineral water according to the Kurlov M formula:.City of Method of receiving mineral waters.

4.2.3 Peloidotherapy. Classification of therapeutic mud by origin: sulfide-silt, sapropel, peat, and hill mud.

4.3 Medical rehabilitation in the structure of sanatorium-resort care.

4.3.1 Spa treatment.

4.3.1.1 Definition of spa treatment. Procedure for organizing spa treatment

4.3.1.2 Categories of citizens sent for sanatorium treatment

4.3.1.3 Types of sanatorium-resort organizations: balneological hospital; mud clinic; resort polyclinic; sanatorium for children, including for children with parents; sanatorium-preventorium; sanatorium health camp of year-round operation.

4.3.1.4 Sanatorium, as the main type of medical and preventive organization in the resort. Medical profile of sanatoriums

4.3.1.5 Principles of operation of a health resort organization. Modes of health and wellness activities in a health resort organization: sparing, sparing-training and training, their content.

4.3.1.6 Selection and referral of patients for sanatorium treatment, registration of documentation.

4.3.2 Medical rehabilitation at health resorts.

4.3.2.1 Main provisions.

4.2.2.2. Rehabilitation programs in sanatoriums, as forms of after-treatment in the conditions of specialized (rehabilitation) departments of sanatoriums after inpatient treatment of patients with disabling diseases on free vouchers.

4.2.2.3. The main tasks of medical rehabilitation in a sanatorium.

4.2.2.4 Procedure for issuing vouchers for post-treatment of patients

4.2.2.5. Documents for referral for further treatment (rehabilitation) to a sanatorium, which are issued to the patient.

4.2.2.6. The list of diseases after which patients are sent for further treatment to rehabilitation departments of sanatoriums at the expense of social insurance funds.

4.4 Manual therapy.

4.3.1. Basic concepts and principles of manual therapy.

4.3.2 Indications and contraindications for the appointment of manual therapy.

4.3.3 Parameters and methods of treatment in manual therapy: massage movements, mobilization, manipulation.

4.3.4 Myofascial release.

4.5 Therapeutic nutrition.

4.5.1.1 Basics of therapeutic nutritionThe law of energy adequacy of nutrition, the law of qualitative (plastic) 4

4.5.1.2 The law of enzymatic activity, the law of biotic adequacy, the law of compliance with the food intake regime.

4.5.2 Nutrition assessment and identification of nutritional support needs

4.5.2.1 Integrated nutrition assessment indicatorsPr-z MZMinistry of Health and Social Development Russian Federation No. 330 dated 05.08.2003 .

4.5.2.2 Criteria for protein and energy insufficiency: mild, moderate, severe degree of insufficiency

4.5.2.3 Therapeutic nutrition in medical rehabilitation programs.

4.5.2.4 Standard diets, diet regimen

Topic 5.

5.1 Reflexology.

5.2 Psychological rehabilitation.

5.3 Medical supervision in medical rehabilitation. The form of conducting is a practical lesson.

Questions on the topics of the section (for discussion in class, for self-study)

5.1 *Reflexology*.

5.1.1 Basic concepts.

5.1.1 Modern ideas about the mechanisms дейтствия of reflexology.

5.1.2 Concepts of meridians and biologically active points (BAT).

5.1.3 Ancient Chinese concepts of Zhen-ju therapy . Classification of BAHT. Five standard

points on the meridian, the principles of their use, the principles of drawing up a reflexotherapy prescription.

5.1.4 Modern methods of reflexology. Physiopuncture. Therapeutic effect. Therapeutic effects. Indications. Contraindications. Parameters

5.1.5 Computer electro -pulse scanning.

5.2 Psychological rehabilitation.

- 5.2.1 Basic concepts and principles
- 5.2.1.1 Psychological correction
- 5.2.2 The main tasks of psychological rehabilitation.

5.2.1. Basic principles of psychological rehabilitation. Therapeutic effects. Indications. Contraindications.

5.2.2 Methods of psychological rehabilitation.

5.2.3 Traditional methods. Apitherapy. Ampelotherapy, Hirudotherapy. Psammotherapy. Enotherapy. Herbal medicine

5.3 *Medical supervision in medical rehabilitation.*

- 5.3.1 Basic concepts.
- 5.3.1.1 Goals and objectives of medical supervision
- 5.3.2 Types of medical control and their content.

- 5.3.2.1 Diagnostics of the patient's physical development and functional state .
- 5.3.2.2 Features of choosing a physical activity mode.
- 5.3.2.2.1 6-minute walk test
- 5.3.2.2.2 Assessment of the patient's condition on the scale of The Borg.
- 5.3.2.2.3 Heart rate monitoring. The maximum allowable heart rate during exercise,

depending on the age. Dynamics of blood pressure during physical exertion

- 5.3.2.2.4 Estimation of the load value based on body weight dynamics
- 5.3.2.2.5 SampleMartinet. Types of reactions to physical activity based on the results of the
- 5.3.2.2.6 Submaximal bicycle ergometric test

5.3.2.2.7 A test recommended by WHO for determining the physical performance of athletes and physical athletes PWC170.

5.3.2.2.8 Determination of the respiratory rate

5.3.2.2.9 Determination of vital capacity of lungs (VEL).

- 5.3.2.2.10 Breath-holding tests. Sample of the Bar. Sample Genchi
- 5.3.2.2.11 Кистевая Hand dynamometry

5.3.2.2.12 Drawing up the physiological curve of the lesson

5.3.2.2.13 Evaluation scales for integral assessment of the patient's condition. Standard:

severity scores for acute and chronic diseases (APACHE III), quantitative pain scale (NPRS),

physiological index (PI), respiratory index

index (ResI).

5.3.2.2.14 The importance of medical supervision in medical rehabilitation.

Topic 6.

test

- **6.1** Therapeutic physical culture (physical therapy).
- 6.2 Wellness methods
- **6.3** Rehabilitation of disabled people.

The form of conducting is a practical lesson.

Questions on the topics of the section (for discussion in class, for self-study)

6.1 Therapeutic physical culture (LFK).

6.1. Basic provisions and principles of physical therapy.

6.1.1 Main provisions. Organization of physical therapy in the Russian Federation:Decree No. 337 of the Ministry of Health of the Russian Federation dated 20.08.2001 "On measures for further development and improvement of sports medicine and physical therapy". Subject of physical therapy study. Object of physical therapy study. Medical documentation in departments and physical therapy rooms (f. 0.42/y).

6.1.2. Principles of physical therapy. Principles of therapeutic use of physical exercises. The principle of active participation of the patient in physical training. The principle of individual physical activity. The principle of regular exercise. The principle of adequacy of physical activity. The principle of gradual and consistent increase in physical activity.

6.2. Methods of therapeutic physical culture.

6.2.1 Kinesitherapy.

6.2.1.1 Methodology of kinesotherapy. Types of exercises. Mechanisms of action of physical exercises on the body: formation of integrated motor reflexes, correction of the tone of the central nervous system, formation of temporary and permanent compensations, development of new compensatory reactions, stimulating effect of physical exercises on various body systems, restoration of trophism, increased reactivity and resistance to pathogenic environmental factors. Therapeutic effects: Tonic, trophostimulating, reconstructive, compensatory. Indications for kinesitherapy. Contraindications. DosageKinesitherapy. Classification of physical exercises. 6.2.1.2 Various forms of kinesitherapy.Proprioceptive Neuromuscular

Facilitation(Neuromuscular FacilationPNF) methodKabata). MethodBobat. Voight's method. Passive suspension systems. Active stretchsystems.

6.2.1.3 Therapeutic gymnastics as a form of kinesotherapy. Methods of conducting therapeutic gymnastics. Introductory, main and final parts. Curve of physiological load during therapeutic gymnastics. Types of exercises

used in the water and final part комлексаof the LG complex.

6.2.1.4 Morning exercises as a form of kinesotherapy. Goals and objectives. Approximate set of physical exercises in the morning gymnastics.

6.2.1.5 Therapeutic motor mode as a form of kinesotherapy. Therapeutic effects: training, correcting, toning, compensatory. Motor modes in the hospital and their content. Criteria for transferring from one motor mode to another. Functional tests performed when switching from one motor mode to another. Therapeutic motor modes in health resorts.

6.2.2. Therapeutic walking. Types of therapeutic walking. Dosed physical activity during normal and Nordic walking. Indications and contraindications

6.2.3 Mechanokinesitherapy. Movements on motorized simulators. Therapeutic effects. Indications. Contraindications. Parameters.

6.2.4 Bio-controlled mechanokinesitherapy. Therapeutic effects. Locomotor-corrective, tonic, metabolic. Indications. Contraindications. Computerized simulators (HUBER, IMOOVE, etc.) Features of training methods. Indications. Contraindications.

6.2.5 Hydrokinesitherapy. Therapeutic effects. Trofo-, myostimulating, tonic, locomotorcorrecting, actoprotective. Indications. Contraindications. Parameters. Therapeutic swimming. Aquagymnastics. Aquastep. Aquafitness, dosage of procedures. Indications and contraindications.

6.2.6 Robotic mechanotherapy. Therapeutic effects. Locomotor-correcting, tropho-and myo-stimulating. Indications. Contraindications. Parameters. Robots classified according to the principle of operation: end-effector robots (Mit-Manus, ARM Guide, MIME),exoskeleton robots: walking training robots (Gait trainer GT II). вертикализатор Erigo verticalizer robot, Робот-, ANYMOV verticalizer robot, Lokomoat Computerized robot, and VR robots: CAREN robot. Robots-compensators CON-TREX, Biodex. Principles of physical activity dosing in robotics.

6.2.7 Occupational therapy. Mechanisms of action. Parameters:patient occupancy. Types of employment. Occupational therapy strategies: - developmental (recovery

impaired function) and compensatory (replacement of a lost function). Labor operations. Therapeutic effects. Motor-correcting, tonic, psychostimulating, actoprotective. Evaluation of the effectiveness of the course of procedures on the scales of assessment of the International Classification of Functioning-ICF. Indications and contraindications.

6.2.8 Sports exercises. Therapeutic effects. Motor-correcting, psychostimulating. Parameters. Activities: Skiing. Medium and heavy load mode. Swimming. Medium and heavy load mode. Breaststroke or freestyle swimming without taking your hands out of the water. Volleyball. Lawn tennis. Table tennis. Badminton.

6.2.9 Orthotherapy. Tasks of orthotherapy. Therapeutic effects. Locomotor-correcting, myotonic, muscle relaxant. Indications. Contraindications. Parameters. Types of orthoses. Static orthoses (passive splints) Dynamic orthoses. Functional orthoses. Active-passive buses. Bio-controlled tires in rehabilitation. ОртезыRobot orthoses for joints. Terms of using orthoses.

6.2. Wellness methods

6.2.1 Health assessment здоровья

6.2.1.1 Health and its diagnostics. Assessment of the energy potential by the MPC indicator (Maximum oxygen consumption). Kerdo Vegetative Index

(Coefficient of vegetative equilibrium according to A.M.To Vane,).

6.2.1.2 Somatic health and methods for assessing the functional and morphological properties of the body. Height-weight ratio (indexQuetelet). Life index. A double product. Martinet's test-Kushelevsky. Physical performance of a person. Calculating the IPC.

6.2.2 Wellness training sessions. Health-improving physical activity and adaptation mechanisms.

6.2.2.1 Physical activity parameters

6.2.2.2 Structure of wellness training. Training phases. Frequency of training sessions. General endurance training, dosing.

6.2.2.3. Health training in modern health programs. Aerobics (rhythmic gymnastics). Stepaerobics (using step exercises).

platforms), fitball-aerobics (aerobics on fitballs). Fitness. Wellnessfacilities.

6.2.3. Health-improving physical methods.

6.2.3.1 Methods. Staminostimulatingagents. Protectiveones. Actoprotective methods

6.2.3.2 Methods. Non-specific ones. Specific features

6.3 Rehabilitation of disabled people.

6.3.1 Fundamentals of rehabilitation assistance for disabled people.

6.3.1.1 Three-dimensional concept of disease impact assessment (according to WHO recommendations, 1989).

6.3.1.2 Tasks of medical and social expertise.

6.3.1.3 The main directions of rehabilitation of disabled people. "Medical and social rehabilitation". Professional rehabilitation. Social rehabilitation

6.3.2 Individual rehabilitation program for a disabled person.

6.3.2.1 A complex of rehabilitation measures optimal for a disabled person in an individual program. Form of an individual rehabilitation program for a disabled person, Пр-3 Ministry of Health and Social Development Russian Federation No. 379n dated 04.08.2008. Sections of the IPR.Evaluation of the results проведеной of rehabilitation performed.

6.3.3 Technical means for rehabilitation of disabled people.

6.3.3.1. A new socially-oriented model of disability implemented by WHO.

6.3.3.2 TCP Main Feature

Section 2. Medical rehabilitation in clinical practice.

Topic 7.

7.1 Medical rehabilitation in cardiology.

7.2 Medical rehabilitation in pulmonology.

(The form of conducting is a practical lesson).

Questions on the topics of the section (for discussion in class, for self-study).

7.1 *Medical rehabilitation in cardiology.*

7.1.1 Model of cardiorehabilitation in the Russian Federation.

7.1.2 Standard of medical care for patients with acute myocardial infarctionΠp-3 Ministry of Health and Social Development of the Russian Federation No. 548 dated 06.09.2005

7.1.3 Groups of patients who need medical rehabilitation.

7.1.4 Stages of activity in patients with myocardial infarction in a hospital setting.

7.1.5 Stages of activity in patients with myocardial infarction in a polyclinic or spa.

7.1.6 Tasks of medical rehabilitation in patients with myocardial infarction. Kinesiotherapy. Physical methods of treatment. Psychotherapy. Therapeutic nutrition. Contraindications. Performance evaluation.

7.1.7 Tasks of medical rehabilitation in CHD.

7.1.8 Characteristics of functional classes of CHD patients. Kinesiotherapy. Dosage of physical activity, depending on the functional class. Therapeutic swimming modes. Physical methods of treatment. Psychotherapy. Therapeutic nutrition. Performance evaluation. Contraindications.

7.1.9 Tasks of rehabilitation of operated patients with CHD. Condition after реваскуляризациисаrdiac revascularization. Kinesiotherapy. Principles of physical activity dosing. Physical methods of treatment. Psychotherapy. Therapeutic nutrition. Contraindications. Performance evaluation.

7.1.10 Tasks of rehabilitation for hypertension. Standards of primary health care for primary arterial hypertension (hypertension) approved by Order of the Ministry of Health of the Russian Federation No. 708n of 9.11.202. Kinesiotherapy, dosage of physical activity.. Physical methods of treatment. Psychotherapy. Therapeutic nutrition. Contraindications. Performance evaluation.

7.2 *Medical rehabilitation in pulmonology.*

7.2.1 Fundamentals of pulmonary rehabilitation in the Russian Federation, the procedure for providing medical care to patients in the "pulmonology" profile approved by the order of the Ministry of HealthRussian Federation from 15.11.2012

No. 916n.

7.2.2 Tasks of rehabilitation for pneumonia. Kinesiotherapy. Physical methods of treatment. Psychotherapy. Therapeutic nutrition. Contraindications. Performance evaluation.

7.2.3 Purpose and objectives of medical rehabilitation of patients with COPD. Standards of medical care for patients with COPD (chronic obstructive pulmonary disease). Stages of COPD development. System of functional classes of COPD patients. Physical methods of treatment. Kinesiotherapy. Psychotherapy. Therapeutic nutrition. .Contraindications. Performance criteria.

7.2.4 Tasks of rehabilitation of patients with bronchial asthma. Kinesiotherapy, principles of physical activity dosage. Special breathing exercises. Psychotherapy. Therapeutic nutrition. Performance criteria. Contraindications.

Topic 8.

8.1 Medical rehabilitation in gastroenterology and endocrinology.

8.2 Medical rehabilitation in oncology.

8.3 Medical rehabilitation for infectious diseases.

8.4 Medical rehabilitation in neurology.

(The form of conducting is a practical lesson).

Questions on the topics of the section (for discussion in class, for self-study.

8.1 Medical rehabilitation in gastroenterology and endocrinology.

8.1.1 Fundamentals of medical rehabilitation in gastroenterology. Tasks of medical rehabilitation in gastroenterology. Procedure for providing medical care to the population, Pr-z of the Ministry of Health of the Russian Federation from 12.11.2012, 906n. Procedure for providing medical care to the population by profile

"gastroenterology "

8.1.2 Medical rehabilitation for diseases of the operated stomach and gallbladder.. Physical methods of treatment. Kinesiotherapy. Psychotherapy. Therapeutic nutrition.

8.1.3 Fundamentals of medical rehabilitation in endocrinology. Tasks of medical rehabilitation in endocrinology. Pr-z of the Ministry of Health of the Russian Federation No. 899n dated 12.11.2012. Procedure for providing medical care to the adult population in the "endocrinology" profile.

8.1.4 Diabetes mellitus, major syndromes. Indications and contraindications for the appointment of medical rehabilitation. Physical methods of treatment. Kinesiotherapy. Psychotherapy. Therapeutic nutrition. Performance criteria.

8.1.5 Fundamentals of medical rehabilitation in oncology. Kinesiotherapy. Physical methods of treatment. Psychotherapy. Therapeutic nutrition. Social rehabilitation. Efficiency criteria.
8.1.6 Fundamentals of medical rehabilitation for infectious diseases.

8.1.6.1 Tasks of medical rehabilitation for viral hepatitis. Kinesiotherapy. Psychotherapy. Therapeutic nutrition. Efficiency criteria.

8.1.6.2 Tasks of medical rehabilitation for tuberculosis. Procedure for providing medical care to the population, Pr-z of the Ministry of Health of the Russian Federation from 15.11.2012, 932n. on approval of the Procedure for providing medical care to tuberculosis patients. The main syndromes in tuberculosis. Physical methods of treatment. Kinesiotherapy. Psychotherapy. Therapeutic nutrition. Efficiency criteria.

8.1.7 Medical rehabilitation in neurology. World model of neurorehabilitation. Organization of neurorehabilitation in the Russian Federation: Pr-z of the Ministry of Health of the Russian Federation No. 926n. and No. 928n. "Procedure for providing medical care to adults with diseases of the nervous system and providing medical care to patients with acute cerebrovascular accident.". Patient groups indicated for medical rehabilitation. Contraindications for medical rehabilitation.

8.1.8 Medical rehabilitation for acute cerebrovascular accident (ACV). Pathophysiological features of ONMC. Tasks of medical rehabilitation. Treatment by position. Early verticalization. Correction of swallowing disorders. Ontogenetic kinesitherapy. Kinesitherapy. Physical methods of treatment. Psychotherapy. Therapeutic nutrition. Efficiency criteria.

8.1.9 Medical rehabilitation for vertebrogenic diseases of the peripheral nervous system. Pathophysiological features of peripheral nervous system diseases systems. The main syndromes of diseases. Rehabilitation tasks. Kinesitherapy. Physical methods of treatment. Reflexology. Manual therapy. Psychotherapy. Therapeutic nutrition. Contraindications to medical rehabilitation. Efficiency criteria. Contraindications for medical rehabilitation.

Topic 9.

- 9.1 Medical rehabilitation in traumatology and orthopedics.
- 9.2 Medical rehabilitation in surgery.
- 9.3 Medical rehabilitation in auscherism and gynecology.
- 9.4 Medical rehabilitation in pediatrics

(The form of conducting is a practical lesson).

Questions on the topics of the section (for discussion in class, for self-study).

9.1 Medical rehabilitation in traumatology and orthopedics.

9.1.1 Fundamentals of medical rehabilitation in traumatology and orthopedics. Procedure for providing medical care in the field of traumatology and orthopedics. Pr-z of the Ministry of Health of the Russian Federation No. 901n dated 12.11.2012. On approval of the procedure. Providing medical care to the population by profile. "Traumatology and orthopedics". Indications and contraindications for the appointment of medical rehabilitation. Pathophysiological bases костнооf musculoskeletal system injuries. Periods of the treatment process for injuries of the musculoskeletal system. Post-traumatic and postoperative syndromes.

9.1.2 Tasks of medical rehabilitation related to damage or surgery of the musculoskeletal system. Features of rehabilitation in conservative and operative methods of treating injuries and deformities of the musculoskeletal system. Physical methods of treatment. Kinesiotherapy. Psychotherapy. Therapeutic nutrition. Social rehabilitation . Performance criteria. Contraindications.

9.2 Medical rehabilitation in surgery.

9.2.1 Fundamentals of medical rehabilitation in surgery. Procedure for providing medical care to the population in the "surgery" profile. Pr-z of the Ministry of Health of the Russian Federation from 15.11.2012. Pathophysiological features of surgical trauma. Indications and contraindications for the appointment of medical rehabilitation.

9.2.2 Features of medical rehabilitation during lung surgery. Kinesiotherapy. Physical methods of treatment. Psychotherapy. Therapeutic nutrition. Social rehabilitation Performance criteria. Contraindications.

9.2.3 Features of medical rehabilitation during operations on the abdominal organs. Kinesiotherapy. Physical methods of treatment. Psychotherapy. Therapeutic nutrition. Social rehabilitation . Performance criteria. Contraindications.

9.3 Medical rehabilitation in auscherism and gynecology.

9.3.1 Fundamentals of medical rehabilitation in obstetrics and gynecology. Procedure for providing medical care in the "obstetrics and gynecology" profile. Pr-z of the Ministry of Health of the Russian Federation No. 572n dated 01.11.2012. Indications and contraindications for the appointment of medical rehabilitation. The most common extragenital diseases during pregnancy.

9.3.2 Features of medical rehabilitation during pregnancy with extragenital and obstetric pathology: pregnant women with arterial hypertension; pregnant women with heart defects; pregnant women with kidney diseases; pregnant women with diabetes mellitus; stress urinary incontinence in pregnant women. Individual rehabilitation programs. Criteria for effectiveness in pregnancy with extragenital and obstetric pathology.

9.3.3 Threat of termination of pregnancy. Individual rehabilitation programs.

Performance criteria.

9.3.4 Features of medical rehabilitation in inflammatory diseases of the female genital organs. Pathophysiological bases of inflammatory processes in the female genital organs. Indications and contraindications for medical rehabilitation. Kinesiotherapy. Physical methods of treatment. Psychotherapy. Therapeutic nutrition. Performance criteria.

9.4 Medical rehabilitation in pediatrics

9.4.1 Medical rehabilitation in pediatrics. Procedure for providing medical care in the pediatrics profile. Pr-z of the Ministry of Health of the Russian Federation No. 366n dated 16.04.2012."On approval of the Procedure for providing pediatric care". Indications and contraindications for the appointment of medical rehabilitation. Features of the physiology of the child 's body.

9.4.2 Psychotherapeutic preparation of a child for medical rehabilitation methods. Features of the use of physiotherapy in childhood.

9.4.3 Leading means of medical rehabilitation in children with severe deformities of the musculoskeletal system due to mainly static deformities (flat feet, posture disorders, scoliosis, muscle imbalance, muscle hypertonus).

9.4.4 Leading means of medical rehabilitation in children with respiratory diseases.

9.4.5 Leading means of medical rehabilitation in children with diseases of the gastrointestinal tract

9.4.6 Age-related terms for prescribing physical rehabilitation methods.

7. LABORATORY PRACTICE - This type of work is not provided for by the UE.

8. Topics of term papers and test papers — This type of work is not provided UP

9. SUBJECT OF RESEARCH PAPERS

1. Fundamentals of medical rehabilitation.

2. Medical, social and professional rehabilitation

3. International Classification of Functioning, Disability and Health (ICF) as a basis for the work of a multidisciplinary team

4. Contents of the Order of the Ministry of Health of the Russian Federation No. 1705n dated 29.12.2012 "On the procedure for providing medical rehabilitation" (in outpatient settings, in a day hospital, in hospitals).

5. Contents of the Order of the Ministry of Labor of the Russian Federation No. 572n dated 03.09.2018 "On approval of the professional standard "Specialist in Medical rehabilitation"

6. Fundamentals of physical therapy.

- 7. Constant and pulsed currents in physiotherapy
- 8. Ultra-high frequency and ultra-high frequency therapy in physical therapy
- 9. Magnetictherapy.
- 10. Infrared radiation, chromotherapy and ultraviolet radiation in physical therapy
- 11. Laser therapy.
- 12. Therapeutic massage
- 13. Aerosol therapy haloaerosol therapy, aerophytotherapy.
- 14. Hydrotherapy.
- 15. Thermotherapy.
- 16. Spa therapy.
- 17. Medical rehabilitation in the structure of sanatorium-resort care.

- 18. Manual therapy.
- 19. Therapeutic nutrition.
- 20. Fundamentals of reflexology.
- 21. Wellness methods
- 22. Physical therapy in the system of medical rehabilitation
- 23. Rehabilitation of disabled people.
- 24. Kinesotherapy in medical rehabilitation and medical rehabilitation.
- 25. Medical rehabilitation in cardiology.
- 26. Medical rehabilitation in pulmonology.
- 27. Medical rehabilitation in gastroenterology and endocrinology.
- 28. Medical rehabilitation for infectious diseases.
- 29. Medical rehabilitation in neurology.
- 30. Medical rehabilitation in traumatology and orthopedics.
- 31. Medical rehabilitation in surgery.
- 32. Medical rehabilitation in obstetrics and gynecology.
- 33. Medical rehabilitation in pediatrics

Requirements for writing an abstract: the abstract should reflect the goals and objectives set, as well as disclose the issue being studied, combining capacity and conciseness. The volume of the abstract is 10-12 sheets of typewritten text, 1-2 sheets – introduction, 8-10-main material, 1-2-conclusion. The list of references is given in accordance with the standard requirements.

9. LIST OF QUESTIONS FOR THE TEST

1. The concept of rehabilitation and medical rehabilitation. Indications and contraindications for the use of medical rehabilitation equipment. Guidelines for providing rehabilitation care to patients: Pr-z of the Ministry of Health of the Russian Federation No. 1705n dated 29.12.2012. "On the procedure for providing medical rehabilitation" (in outpatient settings, in a day hospital, in hospitals).

- 2. Carrying out rehabilitation activities at various stages of the rehabilitation process. List the factors that limit the implementation of rehabilitation measures.
- Formation of goals and objectives of rehabilitation activities.
- 3. Formation of a rehabilitation program, integrated use of drug and non-drug therapy. Evaluation of the effectiveness of rehabilitation measures and their prognosis.
- 4. Research and evaluation of daily activities. Functional Independence Scale (FIM),

Bartel, and Katzscales. The concept of a functional class. Organization and principles of work of a multidisciplinary team

5. International classification of functioning, limitations

life and health (ICF). Classification structure and its significance in the work of a multidisciplinary team.

6. Principles of developing an individual rehabilitation program (IPR). Evaluation of the effectiveness of rehabilitation measures.

7. Modern means and technologies of physical therapy. Classification of physical entities

exercises used in physical therapy. Mechanisms of therapeutic action of movements. Principles of prescribing physical therapy Indications and contraindications for prescribing physical therapy.

8. Forms and methods of conducting physical therapy classes, principles of dosing physical exercises in physical therapy classes Schemes for building therapeutic gymnastics complexes Motor modes at various stages of rehabilitation.

9. Organizational structure of physical therapy departments and offices. Medical documentation of physical therapy rooms. (f. 0. 42/y). The concept of reflexology (RT). Mechanisms of action of reflexotherapy. Classification of methods of classical reflexology Classification of physiopuncture methods of reflexology.

10. Theoretical foundations of physical therapy. Definition and subject of physiotherapy study. Classification of physical factors. Physiological mechanisms of action of physical factors. Theoretical foundations of the influence of physical factors on the body in the light of the latest achievements in biophysics, biochemistry and physiology.

11. The concept of local, reflex-segmental and general reactions of the body to the action of physical factors. Basic principles of therapeutic use of physical factors. General contraindications to the use of physical therapy.

12. Features of the use of physiotherapy in the elderly. Features of the use of physiotherapy in children.

13. Organization of physical therapy services. Organization of work of the physiotherapy department, office. Safety precautions for physiotherapy procedures. Medical documentation of physiotherapy rooms and departments. Accounting documentation forms. F. 0/44.

14. Electroplating. Characteristics and physiological effects of direct current. Treatment methods. Therapeutic effects. Indications and contraindications. Modern devices and treatment parameters.

15. Drug electrophoresis. Principles of introduction of medicinal substances into the body by direct current. Therapeutic effects of drug electrophoresis. Indications and contraindications.

Features of the method of drug electrophoresis. Mechanism of action. Therapeutic effects. Indications and contraindications. Technique and methodology of performing procedures. Parameters and devices. What are the features and advantages of drug electrophoresis over other methods of drug administration?

16. Pulsed electrotherapy of peripheral influence, general characteristics. Diadynamictherapy. Physical characteristics and mechanism of action

applied current. Therapeutic effects. Indications and contraindications. Technique and methodology of performing procedures. Parameters and devices.

17. Amplipulstherapy. Physical characteristics and mechanism of action applied current. Therapeutic effects. Indications and contraindications. Technique and methodology of performing procedures. Parameters and devices.

18. Medium-frequency electrotherapy with high-voltage alternating electric current: local darsonvalization. Physical characteristic of the current. Mechanism of action. Therapeutic effects. Indications and contraindications. Technique and methodology of performing procedures. Parameters and devices

19. Ultrahigh frequency alternating electric field: UHF therapy. Physical characteristics of the electrical system used for medical purposes электрической

component of the electromagnetic field. Oscillatory and thermal components of the mechanism of therapeutic action of UHF oscillations, patterns of energy distribution in tissues,

20. The main therapeutic effects of UHF therapy. Indications and contraindications, devices, parameters of therapeutic effect. Methods of conducting procedures depending on the stage of the pathological process, dosage of procedures.

21. Electromagnetic fields. Microwave ultra-high frequency therapy. What are the physical characteristics of DMV and SMV therapy methods? What is the reason for the penetrating power of microwave effects? When using which method it is more pronounced — with DMV or CMV therapy? Why? In which tissues does the maximum heat release occur during microwave therapy? Explain the therapeutic effects of CMV and DMV therapy. Name the indications and contraindications for their use.

22. The main therapeutic effects of DMV therapy, indications and contraindications, parameters of therapeutic effects, methods of procedures depending on the stage of the pathological process.

23. Centimeter-wave, millimeter-wave therapy. Physical characteristics of the active factors. Oscillatory and thermal components of the mechanism of therapeutic action of microwave oscillations. The main therapeutic effects of, centimeter-wave, millimeter-wave therapy, parameters of therapeutic effects, methods of procedures depending on the stage of the pathological process. Name the indications and contraindications for their use.

24. Magnetic fields.Variable low-frequency magnetic field: PeMPtherapy. Mechanisms of formation of the main therapeutic effects, indications and contraindications, devices, parameters of therapeutic effects, the main types of low-frequency magnetic fields used. Methods of conducting medical procedures and selecting the exposure mode, dosing of variable low-frequency magnetic fields ? What is the effect of a low-frequency magnetic field on the liquid crystal structures of the membrane and the cytoplasm of cells? Explain the significance of the changes that occur in these structures for the functioning of cells.

25. High-frequency магнитотерапияmagnetic therapy: inductothermy. Mechanisms of heat generation in the body under the action of high-and ultrahigh-frequency magnetic field fluctuations, patterns of energy distribution in tissues. The main therapeutic effects, indications and contraindications, devices, parameters of therapeutic effects, methods of procedures depending on the stage of the pathological process, dosage. Physical characteristics of fields. Mechanism of action. Therapeutic effects. Treatment methods. Parameters. Indications and contraindications. Mobile devices.

26. Therapeutic use of ultraviolet radiation. The main types of ultraviolet radiation (long - medium - and short-wave) and their brief characteristics. Physico-chemical effects of UFOs in tissues. Mechanisms of biological and therapeutic-preventive action, indications and contraindications. Parameters of therapeutic effect, devices for the Ural Federal District.

27. Methods and basic schemes of general UFOs. PUVA therapy. Treatment methods. Krovi UFD. Principles of UFD dosimetry, biodose, types of biodosimeters. Compatible with other types of phototherapy and electrotherapy.

28. Therapeutic use of laser irradiation. Laser therapy. Physical characteristics of monochromatic and coherent radiation. Fiziko-

chemical effects of laser radiation on biological tissues. Regularities of energy distribution in tissues under the action of laser radiation and the main mechanisms of its biological action. The main biological effects, indications and contraindications, devices, parameters of therapeutic action, methods of procedures, their dosage and compatibility with other methods of physiotherapy.

29. Medicinal ultraphonophoresis, main features and advantages of drug administration by ultrasound, dosage of procedures.

30. Therapeutic massage. Types of massage. Anatomical bases and mechanisms of physiological action of massage, indications, contraindications, rules of massage, characteristics of the main techniques, technique of performing.

31. Aeroiono-and aerosoltherapy. Physical characteristics of the applied factors. Mechanisms of therapeutic action. Therapeutic effects. Technique and methodology of procedures. Indications and contraindications for use Medicinal substances used for aerosoltherapy.

32. Hydrotherapy. Showers, baths, and baths. Characteristics of the methods, therapeutic effects, Indications, contraindications to the appointment, dosage methods, treatment methods. Give a classification of water procedures based on the temperature of the water used. Give a brief description of the main types of shower procedures.

33. Balneotherapy. Definition and classification of mineral waters. Theories of the origin of mineral waters, their composition. General principles of therapeutic use of mineralized water.

34. What is the mechanism of action of sodium chloride baths? Justify the cardiotropic effect of carbon dioxide baths. What is its focus? Explain the significance of water temperature for the development of vascular effects of carbon dioxide baths.

35. Mechanism of action of radon baths. What factors are responsible for the therapeutic effects of radon baths? List the main indications for the appointment of radon baths.

36. The use of heat for medicinal purposes. Thermotherapy. Physiological bases of therapeutic use of heat carriers. Paraffin therapy. The physical properties of paraffin, the mechanism of therapeutic action, indications and contraindications, methods of procedures, dosage principles, compatibility with other methods of physiotherapy, safety during procedures.

37. Peloidotherapy - therapeutic mud, definition, composition, physical and chemical properties, classification. Origin of therapeutic mud. Physical and chemical factors of therapeutic action of mud — mechanical, thermal, chemical and biological. Mechanisms of physiological action and therapeutic effects of peloidtherapy. Indications and contraindications for mud treatment.

38. Climatotherapy. Basic methods of climate therapy. Indications and contraindications for use. Balneotherapy. Basic methods of balneotherapy. Indications and contraindications for the appointment.

39. List the main types of health resorts. Is it possible to locate sanatoriums outside the resort? What is the reason for the specialization of sanatoriums?

40. Comprehensive rehabilitation programs for patients with myocardial infarction at the inpatient stage of rehabilitation.

41. Comprehensive rehabilitation programs for patients with myocardial infarction at the sanatorium stage of rehabilitation.

42. Comprehensive rehabilitation programs for patients with acute and chronic pneumonia at the polyclinic stage of rehabilitation

43. Comprehensive rehabilitation programs for patients with bronchial asthma and bronchiectatic disease.
44. Comprehensive

rehabilitation programs for patients with spinal scoliosis a	nd flat

feet

45. Comprehensive rehabilitation programs for patients with spinal osteochondrosis

46. Comprehensive rehabilitation programs for patients with limb fractures

47. Comprehensive rehabilitation programs for patients with ischemic stroke

48. Comprehensive rehabilitation programs for patients with diabetes mellitus.

49. Comprehensive rehabilitation programs for patients undergoing lung surgery

50. Comprehensive rehabilitation programs for patients with chronic inflammatory diseases of the female genital organs

51. Method of conducting the Stange test, Gence, orthostatic test. Determination of physical performance by the Harvard step test. Basic principles of RF assessment and its relation to health indicators.

52. Types of health-improving training. Clinical effects of wellness training.

53. Characteristics of low, medium, and high rehabilitation potential. Rehabilitation prognosis. Assessment of the effectiveness of rehabilitation measures on the FIM scale (Functional Independence Scale).

54. Justification of the use of rehabilitation tools and methods. Disability criteria.

55. Basic principles of medical rehabilitation. Indications and contraindications.

56. Categories of life activity. Types of disabling consequences of the disease. Basic concepts in rehabilitation: stages of rehabilitation, rehabilitation diagnosis, rehabilitation potential, rehabilitation prognosis, functional classes.

57. Diadynamictherapy. Therapeutic effects, indications, contraindications to the appointment of equipment and methods of procedures.

58. Scheme of the complex of therapeutic gymnastics. Principles of dosage of physical exercises. Indications and contraindications for the appointment of physical therapy.

59. Classification of kinesotherapyagents. Characteristics of kinesotherapy tools.

60. External and internal use of mineral waters. Treatment methods, indications and contraindications.

Name of sections and topics	Type of independent work (study of educational material, problem solving, abstract, report, test work, preparation for passing the test, exam, etc.)	Volume in hours	Form of control (verification of problem solving, abstract, etc.)
Section #1. Fundamentals of medical rehabilitation. Methods and means of medical rehabilitation.			
Topic 1.1.1 Fundamentals of medicalrehabilitation.1.2Basicsof physical therapy	Development of educational material, problem solving, writing a lesson summary, abstract, report, preparation for passing the test		Verification of problem solving, abstract, and synopsis.
Topic 2 . 2.1 Electrotherapy. 2.2 Magnetic therapy	Workingoutthetrainingmaterial,writingalessonsummary,solvingproblems,abstract,registrationoff.044/ypreparationforpassingthetest		Checking решения problem solving, physiotherapy prescriptions, abstract, and synopsis.
Topic 3.3.1 Phototherapy3.2 Therapeutic use of mechanical factors.3.3 Hydrotherapy.3.4 Thermotherapy.	Study of educational material, lectures, writing a summary for the lesson, solving problems, abstract, report, registration of f. 044/y preparation for passing the test.		Checking решения problem solving, physiotherapy prescriptions, abstract, and synopsis.
Topic 4.4.1Spatherapy.4.2Medicalrehabilitation instructureof sanatorium-resortcare.4. 3Manualtherapy.4. 4Therapeuticnutrition.	Working out the curriculum material, writing a lesson summary, solving a problem tasksRussia, abstract, report,	2	Checking the solution problem abstract, solving, synopsis.

Topic 5. 5.1 Reflexology. 5.2 Psychological rehabilitation. 5.3 Medical control in medical rehabilitation.	Working out the curriculum material, writing a lesson summary, problem solving, abstract, report,	2	Checking the solution tasks, abstract, summary.
Topic 6. 5.1 Physical therapy (physical therapy) 5.2 Health-improving methods 5.3Rehabilitation of disabledpeople.	Workingout the curriculummaterial,writing asummary for the lesson, solving problems, abstract, report, registrationof f.042/y preparation for passing the test.		Checking the solution tasks, abstract, and synopsis.
Section 2. Medical rehabilitation in clinical practice.			
Topic 7.7.1 7.1 Medical rehabilitation in cardiology. 7.2 Medical rehabilitation in pulmonology.	Study of educational material, writing a summary for the lesson, solving problems, abstract, report, registration of f. 042/y, f. 044/y, drawing up an individual rehabilitation program (IPR) preparation for passing the test.		Verification of problem solving, abstract, and synopsis.
Topic 8.8.18.1Medical rehabilitation ingastroenterologyandendocrinology.8.2Medical rehabilitation inoncology.8.3Medical rehabilitation forinfectious diseases.8.4Medical rehabilitation inneurology.	Study of educational material, writing a		Verification of problem solving, abstract, and synopsis.

 Topic 9. 9.1 Medical rehabilitation in traumatology and orthopedics. 9.2 Medical rehabilitation in surgery. 9.3 Medical rehabilitation 	Working training material, summary for Registration 042/y, f. 044/y,, pr abstract, report.	out the writing a the lesson. of f. oblem solving,	2	Verification of problem solving, abstract, and synopsis.
in auscherism and gynecology. 9.4 Medical rehabilitation in pediatrics.			10	
Total			18	

11.EDUCATIONAL, METHODICAL AND INFORMATIONAL SUPPORT OF THE DISCIPLINE

a) List of recommended literature.

Basic:

Shanti Ganesh.
 Physical Medicine & Rehabilitation Review Questions. - ISBN 9781451151763. - ISBN 9781469883823. - Locals. - EPUB.
 <u>http://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=2272465&site=ehost</u>
 <u>-live</u>

2. PHYSICAL AND REHABILITATION MEDICINE for Medical Students-Editors Maria Gabriella CERAVOLO Nicolas CHRISTODOULOU <u>https://uems-prm.eu/wp-</u> content/uploads/2020/03/physical rehabilitation medicine for medical students.pdf

Additional:

1. Kruchkova, A. V. Care for Surgical Patients / A. V. Kruchkova, Yu. V. Kondusova, I. A. Poletayeva and others; edited by A. V. Kruchkova. - Moscow: GEOTAR-Media, 2020. - 144 p. - ISBN 978-5-9704-5664-4. - Text : electronic / / EBS "Консультант Student's consultant": [website]. - URL : <u>https://www.studentlibrary.ru/book/ISBN9785970456644.html</u>

2. <u>Vykhodtsev A. N., Grebenkina N. V., Pashkov V. K., Pashkova E. N., Shpilevaya L. I.</u> Manual to practical sessions on medical supervision in physical exercise, sports and clinical practice: Training manual <u>https://e.lanbook.com/reader/book/138710/#1</u>

:

1. Pavlova Yu. M.

Methodological instructions for independent work of students on the discipline "Medical rehabilitation" for the specialty 31.05.01 "General Medicine" full-time education / Pavlova Yu. M. ; Ulyanovsk state university. Ulyanovsk : UlSU, 2019.Загл from the screen. An unpublished resource. In English. yaz. - Text : electronic.

http://lib.ulsu.ru/MegaPro/Download/MObject/8707

2. Pavlova J. M.

The practical use of ICF in rehabilitation for various pathologies: methodical guidelines for independent work of students / J. M. Pavlova; Ulyanovsk state university. Ulyanovsk : UlSU, 2019.Загл from the screen. An unpublished resource. In English. yaz. - Electron. text messages. дан (1 file : 152 KB). -Text : electronic.

http://lib.ulsu.ru/ProtectedView/Book/ViewBook/6224

Согласовано: <u>Ш, Ree-ры Маркирина С.Н.</u> Должность сотрудника научной библиотеки ФИО лата

b) software

NA naming convention		
ATPConsultant Plus		
NEB of the Russian Federation		
EBS IPRbooks		
BS "MegaPro"		
MicrosoftWindows OS		
yOffice Standard"		

c) Professional databases, information and reference systems.

1. Electronic library systems:

1.1. IPRbooks: electronic library system: website / IP Ar Media Group of companies. - Saratov, [2021]. - URL: <u>http://www.iprbookshop.ru</u>. - Access mode: for registeredusers. users. - Text : electronic.

1.2. YURAYT: electronic library system: website / LLC Electronic Publishing House YURAYT. - Moscow, [2021]. - URL: https://urait.ru - - Access mode: for registered users. users. - Text : electronic.

1.3. Student's consultant: electronic library system: website / LLCPolytechresource. - Moscow, [2021]. - URL: <u>https://www.studentlibrary.ru/cgi-bin/mb4x</u>. - Access mode: for registeredusers. users. - Text : electronic.

1.4. Doctor's consultant : electronic library system: website / LLC Higher School of Organization and Management of Healthcare-Comprehensive Medical Consulting. - Moscow, [2021]. – URL: https://www.rosmedlib.ru. - Access mode: for registeredusers. users. – Text : electronic.

1.5. Large Medical Library : electronic library system : website / LLCBugreport. - Tomsk, [2021]. - URL: <u>https://www.books-up.ru/ru/library/</u> . - Access mode: for registeredusers. users. - Text : electronic.

1.6. Lan: electronic library system : website / LLC EBS Lan. - St. Petersburg, [2021]. – URL: <u>https://e.lanbook.com</u>. - Access mode: for registeredusers. users. – Text : electronic.

 1.7. Znanium.com : electronic library system : website / Znanium LLCЗнаниум. - Moscow,

 [2021]. - URL: http://znanium.com. - Access mode : for registeredusers. users. - Text : electronic.

 1.8. Clinical Collection: a collection for medical universities, clinics, and medical libraries / / EBSCOhost
 :
 [portal].
 URL:

http://web.b.ebscohost.com/ehost/search/advanced?vid=1&sid=9f57a3e1-1191-414b-8763-

<u>e97828f9f7e1%40sessionmgr102</u>. – Режим Access mode : for authorization. users. – Text : electronic.

1.9. Russian as a foreign language: an electronic educational resource for foreign students: website / LLCIP Ar Media Company- - Saratov, [2021]. - URL: https://ros-edu.ru - - Access mode: for registered users. users. - Text : electronic.

2. ConsultantPlus [Electronic resource]: reference legal system. / LLC "Consultant Plus" - Electron. dan. - Moscow : ConsultantPlus, [2021].

3. Periodical databases:

3.1. Database of periodicals : electronic journals / LLC IVIS. - Moscow, [2021]. - URL: <u>https://dlib.eastview.com/browse/udb/12</u>. - Access mode : for authorization. users. - Text : electronic.

3.2. eLIBRARY.RU: scientific electronic library : website / Scientific Electronic Library LLC. - Moscow, [2021]. - URL: <u>http://elibrary.ru</u>. - Access mode : for authorization. users. - Text :

electronic

3.3. "Grebennikon": electronic library / Grebennikov Publishing House. - Moscow, [2021]. – URL: <u>https://id2.action-media.ru/Personal/Products</u>. - Access mode : for authorization. users. – Text : electronic.

4. National Electronic Library: electronic library: federal State Information system: website / Ministry of Culture of the Russian Federation; RSL – - Moscow, [2021]. - URL: <u>https://нэб.рф</u>. - Access mode: for users of the scientific library. – Text : electronic.

5. <u>SMART Imagebase</u> // EBSCOhost : [portal]. – URL: <u>https://ebsco.smartimagebase.com/?TOKEN=EBSCO-</u>

<u>1a2ff8c55aa76d8229047223a7d6dc9c&custid=s6895741</u>. - Access mode : for authorization. users. - Image : electronic.

6. Federal information and educational portals:

6.1. <u>Single window of access to educational resources</u>: federal portal / founder of the Federal State Educational Institution of Higher Professional Education and IT. - URL: <u>http://window.edu.ru/</u>. – Text : electronic.

6.2. <u>Rossiiskoe obrazovanie</u> : federal portal / founder of the Federal State Educational Institution of Higher Professional Education CRGOP and IT. - URL: <u>http://www.edu.ru</u>. - Text : electronic.
7. USU educational resources:

7.1. USU Electronic Library: ABIS Mega-PRO module / Data Express LLC. – URL: <u>http://lib.ulsu.ru/MegaPro/Web</u>. - Access mode: for users of the scientific library. – Text : electronic.

Согласовано: <u>Зони напунова ва кото во во подпись дата</u>

Министерство науки и высшего образования РФ Ульяновский государственный университет	Форма	
Ф-Рабочая программа дисциплины		Concernment of

MATERIAL AND TECHNICAL SUPPORT OF THE

12. **DISCIPLINE:**

Classrooms for conducting lectures, practical classes, for conducting current control and intermediate certification are equipped with furniture, a blackboard and multimedia equipment to provide information to a large audience.

Rooms for independent work are equipped with computer equipment with the ability to connect to the Internet and provide access to an electronic information and educational environment, an electronic library system.

Учебные The classrooms are equipped with computer equipment with the ability to connect to the Internet and provide access to an electronic information and educational environment, an electronic library system.

Equipped with physiotherapy and physical therapy rooms. Equipment of rehabilitation halls of the CenterBubnovsky.

The list of equipment used in the educational process is indicated in accordance with the information on material and technical support and equipment of the educational process posted on the official website of USU in the section

"Information about the educational organization".

SPECIAL CONDITIONS FOR STUDENTS WITH DISABILITIES 3ДОРОВЬЯ 13.

If necessary, students from among persons with disabilities (at the request of the student) can be offered one of the following options for information perception, taking into account their individual psychophysical characteristics::

for people with нарушениями visual impairments: in printed form in enlarged font; in the form of an electronic document; in the form of an audio file (translation of educational materials into audioformat); in printed form in Braille; individual consultations with the involvement of a tiflosurd interpreter; individual tasks and consultations;

for people with hearing impairments: in printed form; in the form of an electronic document; video materials with subtitles; individual consultations with the involvement of a sign language interpreter; individual tasks and consultations;

for people with нарушениями musculoskeletal disorders : in printed form; in the form of an electronic document; in the form of an audio file; individual tasks and consultations.

Developer

signature

position

full name

LIST OF CHANGES of

Educational plan of discipline "Medical rehabilitation"

N⁰	Content of the change or a link to the attached text of the	Full name of the head of the Department developing the discipline	Signature	Date
1	Introduction of changes to item C) Professional databases, information and reference systems item 11 "Educational, methodological and information support of the discipline" with the design of Appendix 1		A	23.06.2022
2	Introduction of changes to item A) Recommended Literature item 11 "Educational, methodological and information support of the discipline" with the design of Appendix 2		Å	23.06.2022

Speciality 31.05.01. «General medicine»

13 . EDUCATIONAL, METHODICAL AND INFORMATIONAL SUPPORT OF THE DISCIPLINE

a) List of recommended literature.

Basic:

 Shanti Ganesh. Physical Medicine & Rehabilitation Review Questions. - ISBN 9781451151763. - ISBN 9781469883823. - Locals. - EPUB. URL: <u>http://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=2272465&site=ehost-live</u>

 Medical rehabilitation : textbook / edited by A. V. Epifanov, E. E. Achkasov, V. A. Epifanov. -Москва : ГЭОТАР-Медиа, 2022. - 664 с. - ISBN 978-5-9704-6688-9. - Текст : электронный // ЭБС "Консультант студента" : [сайт]. - URL : https://www.studentlibrary.ru/book/ISBN9785970466889.html

Additional:

1. Kruchkova, A. V. Care for Surgical Patients / A. V. Kruchkova, Yu. V. Kondusova, I. A. Poletayeva and others; edited by A. V. Kruchkova. - Москва : ГЭОТАР-Медиа, 2020. - 144 с. - ISBN 978-5-9704-5664-4. - Текст : электронный // ЭБС "Консультант студента" : [сайт]. - URL : <u>https://www.studentlibrary.ru/book/ISBN9785970456644.html</u>

2. <u>Vykhodtsev A. N., Grebenkina N. V., Pashkov V. K., Pashkova E. N., Shpilevaya L. I.</u> Manual to practical sessions on medical supervision in physical exercise, sports and clinical practice: teaching guide.- 2019 URL : <u>https://e.lanbook.com/reader/book/138710/#1</u>

Educational and methodical:

1. Pavlova Yu. M.

Methodological instructions for independent work of students on the discipline "Medical rehabilitation" for the specialty 31.05.01 "General Medicine" full-time education / Pavlova Yu. M.; Ulyanovsk state university. - Ulyanovsk : UlSU, 2019. - Загл. с экрана; Неопубликованный ресурс; На англ. яз. - Текст : электронный.

URL : <u>http://lib.ulsu.ru/MegaPro/Download/MObject/8707</u>

2. Pavlova J. M.

The practical use of ICF in rehabilitation for various pathologies: methodical guidelines for independent work of students / J. M. Pavlova; Ulyanovsk state university. - Ulyanovsk : UlSU, 2019. - Загл. с экрана; Неопубликованный ресурс; На англ. яз. - Электрон. текстовые дан. (1 файл : 152 КБ). - Текст : электронный. URL : <u>http://lib.ulsu.ru/MegaPro/Download/MObject/6224</u>

Main Librarian Сторлонициос 4 о подпись Согласовано: Должность сотрудника научной библиотеки ФИО

20.04. Spl?

Профессиональные базы данных, информационно-справочные системы

1. Электронно-библиотечные системы:

1.1. Цифровой образовательный ресурс IPRsmart : электронно-библиотечная система : сайт / ООО Компания «Ай Пи Ар Медиа». - Саратов, [2022]. – URL: http://www.iprbookshop.ru. – Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.2. Образовательная платформа ЮРАЙТ : образовательный ресурс, электронная библиотека : сайт / ООО Электронное издательство ЮРАЙТ. – Москва, [2022]. - URL: https://urait.ru. – Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.3. База данных «Электронная библиотека технического ВУЗа (ЭБС «Консультант студента»): электронно-библиотечная система: сайт / ООО Политехресурс. – Москва, [2022]. – URL: <u>https://www.studentlibrary.ru/cgi-bin/mb4x</u>. – Режим доступа: для зарегистрир. пользователей. – Текст: электронный.

1.4. Консультант врача. Электронная медицинская библиотека : база данных : сайт / ООО Высшая школа организации и управления здравоохранением-Комплексный медицинский консалтинг. – Москва, [2022]. – URL: <u>https://www.rosmedlib.ru</u>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.5. Большая медицинская библиотека : электронно-библиотечная система : сайт / ООО Букап. – Томск, [2022]. – URL: <u>https://www.books-up.ru/ru/library/</u>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.6. ЭБС Лань : электронно-библиотечная система : сайт / ООО ЭБС Лань. – Санкт-Петербург, [2022]. – URL: https://e.lanbook.com. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.7. ЭБС Znanium.com : электронно-библиотечная система : сайт / ООО Знаниум. - Москва, [2022]. - URL: <u>http://znanium.com</u>. – Режим доступа : для зарегистрир. пользователей. - Текст : электронный.

1.8. Clinical Collection : научно-информационная база данных EBSCO // EBSCOhost : [портал]. – URL: <u>http://web.b.ebscohost.com/ehost/search/advanced?vid=1&sid=9f57a3e1-1191-414b-8763-e97828f9f7e1%40sessionmgr102</u>. – Режим доступа : для авториз. пользователей. – Текст : электронный.

1.9. База данных «Русский как иностранный» : электронно-образовательный ресурс для иностранных студентов : сайт / ООО Компания «Ай Пи Ар Медиа». – Саратов, [2022]. – URL: https://ros-edu.ru. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

2. КонсультантПлюс [Электронный ресурс]: справочная правовая система. /ООО «Консультант Плюс» - Электрон. дан. - Москва : КонсультантПлюс, [2022].

3. Базы данных периодических изданий:

3.1. База данных периодических изданий EastView : электронные журналы / ООО ИВИС. - Москва, [2022]. – URL: https://dlib.eastview.com/browse/udb/12. – Режим доступа : для авториз. пользователей. – Текст : электронный.

3.2. eLIBRARY.RU: научная электронная библиотека : сайт / ООО Научная Электронная Библиотека. – Москва, [2022]. – URL: http://elibrary.ru. – Режим доступа : для авториз. пользователей. – Текст : электронный

3.3. Электронная библиотека «Издательского дома «Гребенников» (Grebinnikon) : электронная библиотека / ООО ИД Гребенников. – Москва, [2022]. – URL: https://id2.actionmedia.ru/Personal/Products. – Режим доступа : для авториз. пользователей. – Текст : электронный.

4. Федеральная государственная информационная система «Национальная электронная библиотека» : электронная библиотека : сайт / ФГБУ РГБ. – Москва, [2022]. – URL: https://нэб.рф. – Режим доступа : для пользователей научной библиотеки. – Текст : электронный.

5. SMART Imagebase : научно-информационная база данных EBSCO // EBSCOhost : [портал]. – URL: <u>https://ebsco.smartimagebase.com/?TOKEN=EBSCO-</u>

<u>1a2ff8c55aa76d8229047223a7d6dc9c&custid=s6895741</u>. – Режим доступа : для авториз. пользователей. – Изображение : электронные.

6. Федеральные информационно-образовательные порталы:

6.1. Единое окно доступа к образовательным ресурсам : федеральный портал . – URL: http://window.edu.ru/. – Текст : электронный.

6.2. Российское образование : федеральный портал / учредитель ФГАУ «ФИЦТО». – URL: http://www.edu.ru. – Текст : электронный.

7. Образовательные ресурсы УлГУ:

7.1. Электронная библиотечная система УлГУ : модуль «Электронная библиотека» АБИС Мега-ПРО / ООО «Дата Экспресс». – URL: http://lib.ulsu.ru/MegaPro/Web. – Режим доступа : для пользователей научной библиотеки. – Текст : электронный.

СОГЛАСОВАНО:

04 22 дата Ф.И.О. Должность сотрудника УИТиТ подпись

LIST OF CHANGES of

Educational plan of discipline "Medical rehabilitation"

Speciality 31.05.01. «General medicine»

N⁰	Content of the change or a link to the attached text of the	Full name of the head of the Department developing the discipline	Signature	Date
1	Introduction of changes to item C) Professional databases, information and reference systems item 11 "Educational, methodological and information support of the discipline" with the design of Appendix 1	Mashin V.V.	h	24.05.23
2	Introduction of changes to item A) Recommended Literature item 11 "Educational, methodological and information support of the discipline" with the design of Appendix 2	Mashin V.V.	h	24.05,23

13. EDUCATIONAL, METHODICAL AND INFORMATIONAL SUPPORT OF THE DISCIPLINE

a) List of recommended literature.

Basic:

- Хованская Г. Н. General principles of medical rehabilitation and physiotherapy = Общие основы медицинской реабилитации и физиотерапии : пособие для студентов учреждений высшего образования, обучающихся по специальности 1-79 01 01 «Лечебное дело» [на англ. яз.] : мanual for the Medical Faculty for International Students (Course of studies in English) / Г. Н. Хованская. - Гродно : ГрГМУ, 2019. - 212 с. - ISBN 9789855950944. -Текст : электронный // ЭБС "Букап" : [сайт]. - URL : <u>https://www.books-</u> up.ru/ru/book/general-principles-of-medical-rehabilitation-and-physiotherapy-12068689/
- Medical rehabilitation : textbook / edited by A. V. Epifanov, E. E. Achkasov, V. A. Epifanov. -Москва : ГЭОТАР-Медиа, 2022. - 664 с. - ISBN 978-5-9704-6688-9. - Текст : электронный // ЭБС "Консультант студента" : [сайт]. - URL : https://www.studentlibrary.ru/book/ISBN9785970466889.html

Additional:

1. Kruchkova, A. V. Care for Surgical Patients / A. V. Kruchkova, Yu. V. Kondusova, I. A. Poletayeva and others; edited by A. V. Kruchkova. - Москва : ГЭОТАР-Медиа, 2020. - 144 с. - ISBN 978-5-9704-5664-4. - Текст : электронный // ЭБС "Консультант студента" : [сайт]. - URL : https://www.studentlibrary.ru/book/ISBN9785970456644.html

2. Manual to practical sessions on medical supervision in physical exercise, sports and clinical practice : учебное пособие / А. N. Vykhodtsev, N. V. Grebenkina, V. K. Pashkov [и др.]. — 2-е изд. — Томск : СибГМУ, 2019. — 83 с. — Текст : электронный // Лань : электронно-библиотечная система. — URL: <u>https://e.lanbook.com/book/138710</u>

3. Pavlova J. M.

The practical use of ICF in rehabilitation for various pathologies: methodical guidelines for independent work of students / J. M. Pavlova; Ulyanovsk state university. - Ulyanovsk : UlSU, 2019. - Загл. с экрана; Неопубликованный ресурс; На англ. яз. - Электрон. текстовые дан. (1 файл : 152 КБ). - Текст : электронный.

URL : http://lib.ulsu.ru/MegaPro/Download/MObject/6224

Educational and methodical:

1. Pavlova Yu. M.

Methodological instructions for independent work of students on the discipline "Medical rehabilitation" for the specialty 31.05.01 "General Medicine" full-time education / Pavlova Yu. M. ; Ulyanovsk state university. - Ulyanovsk : UlSU, 2019. - Загл. с экрана; Неопубликованный ресурс; На англ. яз. - Текст : электронный.

URL : http://lib.ulsu.ru/MegaPro/Download/MObject/8707

Согласовано: <u>Leadin SI Specia list ('miljoebneruus</u> должность сотрудника научной библиютеки ФИО подпись дата Стар **15.05**, 2023

Professional databases, information and reference systems

1. Электронно-библиотечные системы:

1.1. Цифровой образовательный ресурс IPRsmart : электронно-библиотечная система : сайт / ООО Компания «Ай Пи Ар Медиа». - Саратов, [2023]. – URL: http://www.iprbookshop.ru. – Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.2. Образовательная платформа ЮРАЙТ : образовательный ресурс, электронная библиотека : сайт / ООО Электронное издательство «ЮРАЙТ». - Москва, [2023]. - URL: https://urait.ru. – Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.3. База данных «Электронная библиотека технического ВУЗа (ЭБС «Консультант студента») : электронно-библиотечная система : сайт / ООО «Политехресурс». – Москва, [2023]. – URL: <u>https://www.studentlibrary.ru/cgi-bin/mb4x</u>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.4. Консультант врача. Электронная медицинская библиотека : база данных : сайт / 000 «Высшая школа организации и управления здравоохранением-Комплексный медицинский консалтинг». – Москва, [2023]. – URL: <u>https://www.rosmedlib.ru</u>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.5. Большая медицинская библиотека : электронно-библиотечная система : сайт / ООО «Букап». – Томск, [2023]. – URL: <u>https://www.books-up.ru/ru/library/</u>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.6. ЭБС Лань : электронно-библиотечная система : сайт / ООО ЭБС «Лань». - Санкт-Петербург, [2023]. – URL: https://e.lanbook.com. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.7. ЭБС Znanium.com : электронно-библиотечная система : сайт / ООО «Знаниум». -Москва, [2023]. - URL: <u>http://znanium.com</u>. – Режим доступа : для зарегистрир. пользователей. - Текст : электронный.

2. КонсультантПлюс [Электронный ресурс]: справочная правовая система. / ООО «Консультант Плюс» - Электрон. дан. - Москва : КонсультантПлюс, [2023].

3. Базы данных периодических изданий:

3.1. eLIBRARY.RU: научная электронная библиотека : сайт / ООО «Научная Электронная Библиотека». – Москва, [2023]. – URL: http://elibrary.ru. – Режим доступа : для авториз. пользователей. – Текст : электронный

3.2. Электронная библиотека «Издательского дома «Гребенников» (Grebinnikon) : электронная библиотека / ООО ИД «Гребенников». – Москва, [2023]. – URL: https://id2.actionmedia.ru/Personal/Products. – Режим доступа : для авториз. пользователей. – Текст :

4. Федеральная государственная информационная система «Национальная электронная библиотека» : электронная библиотека : сайт / ФГБУ РГБ. – Москва, [2023]. – URL: https://нэб.рф. – Режим доступа : для пользователей научной библиотеки. – Текст : электронный.

5. Российское образование : федеральный портал / учредитель ФГАУ «ФИЦТО». -URL: http://www.edu.ru. – Текст : электронный.

6. Электронная библиотечная система УлГУ : модуль «Электронная библиотека» АБИС Mera-ПРО / ООО «Дата Экспресс». – URL: http://lib.ulsu.ru/MegaPro/Web. – Режим доступа : для пользователей научной библиотеки. – Текст : электронный.

APPROVED:

Салавения Mul / Бургание Должность сотрудника УИТиТ Ф.И.О. 15.05.2023