


Ministry of Education and Science of RF Ulyanovsk State University	Form	
F – Educational plan of the discipline		

**APPROVED**

by the decision of the Academic Council of the USU Institute of Medicine,  
Ecology and Physical Culture  
June «22» 2020, № 10/220

Chairman \_\_\_\_\_ Midlenko V.I.  
(signature, signature clarification)  
«22» of June 2020



### EDUCATIONAL PLAN

Course:	Biopsychosocial approach to medical rehabilitation
Faculty	Medical
Department:	Medical Psychology, Psychoneurology and Psychiatry
Grade	II-III

Qualification (major) 31.05.01 «General Medicine»  
*код направления (специальности), полное наименование*

Orientation (profil / specialization) \_\_\_\_\_ specialty  
*полнонаименование*

Form of training \_\_\_\_\_ full-time  
*очная, заочная, очно-заочная (указать только те, которые реализуются)*

Date of introduction into the academic process at Ulyanovsk State University: « 01 » Septem-  
ber \_\_\_\_\_ 2020г.

Revised at the Department meeting, Record № 1 от 31.08.2021 г.



Revised at the Department meeting, Record № 1 от 31.08.2022 г.


Revised at the Department meeting, Record № \_\_\_\_\_ от \_\_\_\_\_ 20 \_\_\_\_\_ г.

Information about developers:

:

Full name	Abbreviation of Department	Academic, degree, title
Pavlova J.M.	DMPP	Associate Professor, PhD

AGREED	AGREED
Head of department, developing discipline	Head of the graduating Department
 _____ / Sabitov I.A. / « <u>15</u> » <u>June</u> 2020.	 _____ /M.A. Wize-Chripunova/ « <u>15</u> » <u>June</u> 2020.

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## 1. OBJECTIVES AND AIM OF DISCIPLINE «BIOPSYCHOSOCIAL APPROACH TO MEDICAL REHABILITATION»:

The aim of discipline: to form the ideas about patternsthe functioning of the human body, the principles of rehabilitation treatment and rehabilitation technologies based on the biopsychosocial model.

List of Objectives that students have to solve in the course of studying the discipline:

1. The formation of knowledge about the biopsychosocial approach to restoring human health
2. Acquaintance with the basics of diagnosis in rehabilitation.
3. Formation of skills to use the international classification of functioning for making a rehabilitation diagnosis, assessing rehabilitation potential;
4. Studying the features of the multidisciplinary rehabilitation team, demonstrating the role of specialists providing medical and social rehabilitation assistance in a multidisciplinary team; principles of multidisciplinary work;
5. Training in teamwork skills with MDB specialists;
6. Training in setting rehabilitation SMART goals and taking into account biopsychosocial interactions in the preparation of an individual rehabilitation plan for patients with various pathologies.

## 2. PLACE OF THE SUBJECT IN THE STRUCTURE OF GEP:

Discipline "Biopsychosocial approach to medical rehabilitation" is referred to electives (FTD.1) in the specialty «General medicine».

The basis for the study of the discipline “Biopsychosocial approach to medical rehabilitation” is a system of information on biology, normal anatomy, neuroanatomy, normal human physiology, bioethics, psychology and pedagogy, formed in the course of study at previous courses. The discipline has interdisciplinary connections with the disciplines of Philosophy, Psychology and Pedagogy, Bioethics, Neuroanatomy, Normal Physiology, and Propaedeutics of Internal Diseases.

The study of the elective course “Biopsychosocial approach to medical rehabilitation” precedes the study of most clinical disciplines, as it forms the basic mental, sensory and motor skills necessary for a doctor of any profile to fulfill his professional duties.

## 1. LIST OF EXPECTED RESULTS OF INSTRUCTION ON THE SUBJECT (UNIT), CORELATED WITH PLANNED RESULTS OF COMPLETING THE PROGRAM

Competence index. Content of a competence (or a part of it)	The proposed results of the course students are:
GCC - 4 - the ability to act in non-standard situations, to bear social and ethical responsibility for decisions made	<p>Know:</p> <ul style="list-style-type: none"> <li>- General aspects of the functioning of man and the limitations of his life</li> <li>- principles of assessment / diagnosis in physical and rehabilitation medicine</li> <li>- goals and results of rehabilitation.</li> <li>- The principles of physical and rehabilitation medicine.</li> <li>- the influence of biological, psychological and social factors on the rehabilitation process.</li> </ul> <p>Be able to:</p>

	<ul style="list-style-type: none"> <li>- take into account the influence of various factors on the rehabilitation process</li> <li>- determine the rehabilitation prognosis of the patient</li> </ul> <p>Own:</p> <ul style="list-style-type: none"> <li>- using theoretical knowledge and practical skills in order to improve professional activities;</li> <li>- skills of analysis of psychosomatic relationships in the rehabilitation process</li> </ul>
GCC - 6 - the ability to use methods and means of physical education to ensure full social and professional activities	<p>Know:</p> <ul style="list-style-type: none"> <li>- sanogenetic mechanisms of restoration of disturbed or compensation of lost body functions and counteraction to pathological processes in the body.</li> <li>- Features of the adaptation of various organs and systems to physical activity</li> <li>- the impact of physical activity on the human body</li> </ul> <p>Be able to:</p> <ul style="list-style-type: none"> <li>- Determine exercise tolerance;</li> <li>- evaluate muscle performance during various movements</li> </ul> <p>Own:</p> <ul style="list-style-type: none"> <li>- skills of manual muscle testing</li> <li>- skills in analyzing the position of the body and various locomotion during motor activity of a person</li> </ul>
GPC - 4 ability and willingness to implement ethical and deontological principles in professional activities	<p>Know:</p> <ul style="list-style-type: none"> <li>- psychological problems of people with disabilities and disabilities, especially family reactions to the disease of one of its members;</li> <li>- The basic rules and principles of professional behavior when working in a team of MDB specialists;</li> <li>- ethical problems of rehabilitation</li> </ul> <p>Be able to:</p> <ul style="list-style-type: none"> <li>- interact with patients and their legal representatives without violating the principles of medical ethics;</li> <li>- build communication with other members of the CSBM in accordance with ethical and deontological standards ;;</li> </ul> <p>Own:</p> <ul style="list-style-type: none"> <li>- methods of self-regulation in the process of communication with the patient and his relatives, without violating ethics and confidentiality;</li> <li>- conflict resolution skills;</li> <li>- skills to account for the psychological characteristics of the patient in the process of his rehabilitation;</li> </ul>
GPC - 9 - the ability to assess morphofunctional, physiological conditions and pathological processes	<p>Know:</p> <ul style="list-style-type: none"> <li>- methods for assessing morphofunctional, physiological conditions and pathological processes in the human body to draw up an individual rehabilitation program;</li> </ul>

in the human body to solve professional problems	<p>- rating scales used in rehabilitation</p> <p>Be able to:</p> <ul style="list-style-type: none"> <li>- assess the degree of violations of various body functions;</li> <li>- use the basic clinical scales used in rehabilitation to assess the severity of violations</li> <li>- interpret data obtained using additional research methods</li> </ul> <p>Own:</p> <ul style="list-style-type: none"> <li>- methods of analysis of the main morphofunctional, physiological states and pathological processes in the human body</li> </ul>
PC-1 ability and readiness to implement a set of measures aimed at maintaining and improving health and including the formation of a healthy lifestyle, preventing the onset and spread of diseases, their early diagnosis, identifying the causes and conditions of their occurrence and development, as well as aimed at eliminating harmful effects on human health of environmental factors	<p>Know:</p> <ul style="list-style-type: none"> <li>- basic approaches to understanding health and disease</li> <li>- The basic principles of building a rehabilitation environment;</li> <li>- environmental factors affecting human health;</li> <li>- The concept of rehabilitation potential.</li> <li>- methods for assessing the state of reactivity, adaptive capabilities of the body and their significance.</li> <li>- interaction and manifestation of various factors in the formation of limitations of the patient's capabilities during rehabilitation.</li> </ul> <p>Be able to:</p> <ul style="list-style-type: none"> <li>- use the international classification of functioning</li> </ul> <p>Own:</p> <ul style="list-style-type: none"> <li>- the skill of formulating a rehabilitation diagnosis in ICF categories;</li> <li>- the skill of drawing up an individual rehabilitation program;</li> <li>- skill in formulating rehabilitation goals</li> </ul>

#### 4. Volume of the subject

##### 4.1. Volume of the subject in credit points (total): 3 credit points

##### 4.2. On types of academic workload (in hours): 108/108\*

Type of academic work	Number of hours (form of education - full time)			
	Total according to the plan	Including on semesters		
		1	2	3
1	2	3	4	5
Work of students with a teacher	90/90*	54/54*	36/36*	-
Classes:				
lectures	18/18*	18/18*	-	-
practical classes and seminars	72/72*	36/36*	36/36*	-
lab classes (practical lessons)	-	-	-	-
Self-study work	18	18	-	-
Concurrent control (number and type: a	Testing, control work	Testing, control work	Testing, control work	

test, a colloquium, a report)				
Course paper	-	-	-	-
Types of intermediate attestation (examination, test)	credit	credit	-	-
Total number of hours on the subject	108/108*	72/72*	36/36*	-

\* The number of hours of work of teaching staff with students in a distance format using e-learning

### 4.3. Contents of the discipline (module). Distribution of hours on themes and kinds of study

Form of study: full-time

Name of sections and themes	Total	Activity format					Form of current control
		Auditory lessons			Inter-active classes	Self-study work	
		Lectures	Practical classes, seminars	Laboratory work			
1	2	3	4	5	6	7	
<b>Section 1. Methodology of physical and rehabilitation medicine</b>							
Introduction to physical and rehabilitation medicine	5	2	2			1	control work, tests
General aspects of a person's functioning and limitations of his life.	7	2	4			1	control work, tests, situational tasks
Sanological health assessment concepts.	5	2	2			1	control work, tests, situational tasks
The concept of "quality of life" as one of the most important modern areas of research in rehabilitation.	5	2	2			1	control work, report on the workshop
The main differences between rehabilitation and treatment.	5	2	2			1	control work, tests
Biopsychosocial approach to rehabilitation	9	4	2		2	1	control work, tests, training project
	36	14	16		2	6	
<b>Section 2. Fundamentals of propaedeutics in physical and rehabilitation medicine</b>							
Examination of neuromuscular, skeletal and	7	2	4			1	control work, tests,

motion-related systems.							situational tasks
Fundamentals of biomechanical and kinematic diagnostics in PRM	7	2	2		2	1	control work, tests, situational tasks
Study of the functions of the cardiovascular and respiratory systems for the purpose of rehabilitation.	5	2	2			1	control work, tests, situational tasks
The study of mental and sensory functions, voice and speech functions.	7	2	4			1	control work, tests, situational tasks
Principles of assessment / diagnosis in physical and rehabilitation medicine	4	2	2				control work, tests, situational tasks
Physiological and pathophysiological substantiation of the rehabilitation process	6	2	4				control work, tests, situational tasks
	36	12	18		2	4	
<b>Section 3. International classification of functioning and organization of the rehabilitation process</b>							
Legal regulation of medical rehabilitation.	4	2	2				control work, tests
Ethical problems in the rehabilitation process. Doctor and society in the era of the development of new rehabilitation technologies.	4	2			2		control work, tests, situational tasks
ICF in rehabilitation medicine	5	2	2			1	
Diagnostic principles in PRM: assessment of impaired function, structures, activity, participation, and environmental factors. Rehabilitation diagnosis	2				2		Tests, workshop report, skills demonstration
The technology of using ICF in rehabilitation.	3				2	1	control work, tests, situational tasks
Practical application of the ICF. The concept of	2				2		control work, tests,

rehabilitation potential and rehabilitation prognosis.							situational tasks
Individual medical rehabilitation program.	6	2	2			2	control work, tests, situational tasks
Psychological aspects of the MDB	4	2				2	control work, tests, situational tasks
Principles of organization of team work of the MDB	2					2	control work, tests, situational tasks
Recovery education: methodological and theoretical foundations.	4	2	2				control work, tests, situational tasks
	36	12	8			12	4
Total	108	18					18

## 5.Course Content

### Section 1. Methodology of physical and rehabilitation medicine

#### Theme 1. Introduction to physical and rehabilitation medicine

Content: Relevance of rehabilitation for people with disabilities and for society. Description of the specialty of physical and rehabilitation medicine. Goals and results of rehabilitation. The principles of physical and rehabilitation medicine. Physical and rehabilitation medicine as an independent specialty. The role of a specialist in physical and rehabilitation medicine: medical, medical and social problems, goals and standards of a specialty, interdisciplinary work. Medical and non-medical rehabilitation in modern healthcare. Basic methods and means of rehabilitation.

#### Topic 2. General aspects of the functioning of man and the limitations of his life.

Topic content: The human body as a single self-developing and self-regulating biological system. The impact of the external environment on human life. The main categories of human activity. Physical and mental activity of a person. Fatigue and overwork during physical and mental work.

Basic terminological concepts (health, illness, norm, working capacity, working ability, legal capacity, rational labor and household device). Specifics of rehabilitation and adaptation.


The concept of disability (disabled person, disabled child, disability, congenital and acquired disability) and its causes. Limitation of life.

#### Theme 3. Sanological concepts of health assessment.

Content: Public Health. Public health. The concept of "lifestyle", its structure and impact on health. The problem of the "amount of health." Indicators for determining population health levels. The system of health levels. The health status of the population and the conditions and factors affecting it.

The meaning of the concepts of lifestyle and healthy lifestyle. Fundamentals of the prevention of



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neuropsychic and psychosomatic disorders, states of mental maladaptation and behavioral disorders. The concept of secondary and tertiary prevention. Patient's health: knowledge, perception and beliefs regarding their health; condition, its consequences, treatment and preventive options. Attitude to health. The internal picture of health - the internal picture of the disease - the internal picture of treatment. Factors affecting the patient's motivation for rehabilitation. The role of the medical psychologist in carrying out rehabilitation measures. Possibilities of compensation for violations in the rehabilitation process. The use of human adaptive capabilities in the rehabilitation process.

**Topic 4. The concept of “quality of life” as one of the most important modern areas of research in rehabilitation.**

Content: Levels of functional abilities, their assessment. The concept of quality of life. Psychological aspects of maintaining and strengthening mental and somatic human health. Factors of a healthy lifestyle and attitude to health. Health-related quality of life: objective characteristics and psychological components, ways of optimization.

Types and forms of social mobility. The influence of the socio-psychological environment on rehabilitation. Psychological problems of people with disabilities, the main reasons that impede the normal psychological integration of people with disabilities in society, psychological characteristics characteristic of people with disabilities. Conceptual and theoretical aspects of disability.

**Topic 5. The main differences between rehabilitation and treatment.**

Topic content: Model of functioning, disability and health in rehabilitation according to the world health organization. Disability models: medical, social, psychological. Disability and the rehabilitation process: a model of traditional medicine, a model of physical and rehabilitation medicine, the rehabilitation process.

**Theme 6. Biopsychosocial approach to rehabilitation**

The content of the topic: The social essence of man, his health, diseases. Biologizing, cybernizing, energizing, sociologizing and psychologizing definitions of diseases. The role of the patient's personality in the rehabilitation process. Biopsychosocial rehabilitation model. Factors predisposing the onset of disability in the disease: unfavorable, harmful, pathogenic. The influence of biological, psychological and social factors on the rehabilitation process. Interaction and manifestation of various factors in the formation of limitations of the patient's capabilities during rehabilitation. Psychological mechanisms to overcome and compensate for the defects caused by the disease. The internal picture of disability. Rehabilitation as a complex of various impact measures: medical, social and professional.

**Section 2. Fundamentals of propaedeutics in physical and rehabilitation medicine**

**Topic 1. Examination of neuromuscular, skeletal and motion-related systems.**


**Contents of the topic:** Different types of muscles. Muscle agonists, antagonists, synergists. Kinetic chain. Morphokinesiology analysis of limbs.

Dynamic anatomy of body positions. General structure, classification and characteristics of joint movements. Normal range of motion in the joints. Cyclic, acyclic, rotational movements.

Functional muscle groups involved in the movements of the head, upper and lower extremities, trunk, and spine. The functions of the muscles of the neck and back with various types of support.

Physiological function of joints and muscles: spine and limbs. Muscle contraction, internal and external resistance, muscle contraction and range of motion in joints. Factors limiting range of motion. Various mechanical types of muscle contraction, mono- and polyarticular muscles. Static or isometric contractions, dynamic or isokinetic contractions. Plyometric contractions.



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Neurophysiology of posture and movement. Functional system of movements. The main types of locomotor activity (postures, gestures, walking).

Examination technique, symptoms and symptom complexes of motor disorders in the pathology of muscles, neuromuscular apparatus, skeleton. Diagnosis of motor disorders: complaints, features of the examination. Projections of muscles and conditions of muscle groups during body movements. Morphology of the studied exercise or movement. Manual muscle testing, range of motion, coordination, dexterity. Assess the severity of violations using recommended scales and questionnaires. Analysis of posture and movement. Muscle stamina function. Functions of an involuntary motor reaction. Gait stereotype function. Mobility (moving the body, changing and maintaining body position). Clinical and functional assessment of joint and muscle function; assessment of motor function and sensitivity.

Walking as an example of a complex, locomotor, translational, cyclic movement associated with repulsion from a supporting surface. Varieties of walking. Walking is normal and with pathological changes in the musculoskeletal system.

Theme 2. Fundamentals of biomechanical and kinematic diagnostics in the FRM

The content of the topic:

General characteristics and classification of human body movements. Classification of the position of the body. Characterization of body positions from the standpoint of the laws of mechanics. Characteristics of the muscles of the trunk, upper and lower extremities. Features of the functioning of organs and support systems in unnatural positions of the body. The influence of movements on the motor apparatus, internal organs, coordination of movements. The sequence (algorithm diagram) of the anatomical analysis of the positions and movements of a person (according to MF Ivanitsky).

The effect of exercise on the spinal column and chest.

Biomechanics of various tissues in the human body (in particular the musculoskeletal system). Initial knowledge of fluid biomechanics and their application to human body fluids.

Topic 3: Investigation of the functions of the cardiovascular and respiratory systems for rehabilitation.

Topic content: Anatomical and physiological characteristics of the cardiovascular and respiratory systems. Basic physiological mechanisms to ensure motor activity. The impact of physical training on the blood, circulatory system, metabolism. The meaning and functionality of breathing. Physiological costs, cardiovascular and pulmonary effects of physical activity. The main characteristics of the adaptation of the respiratory system to motor activity. The main characteristics of the adaptation of the cardiovascular system to motor activity. Motor activity in enhancing the functions of individual internal organs and systems of a person.

Methods for the diagnosis of impaired exercise tolerance. Pulmonary function tests. Functional testing of the cardiovascular system, oxygen saturation, exercises with graduated load.


Topic 4. The study of mental and sensory functions, the functions of voice and speech. Content:

Anatomical and physiological features of the functioning of the brain. Basic postulates of the theory of functional systems and their use in the rehabilitation process. Anatomical relationships of sensory systems, structures of the brain and spinal cord and musculoskeletal system.

Global and specific mental functions, methods of their assessment. Symptoms and symptom complexes of violations. Assessment of cognitive skills, language and speech, memory, behavior.

Anatomical and physiological features of the organs of vision, hearing and balance. Symptoms and symptom complexes of violations. Features of communication with patients suffering from impaired sensory functions.

The mechanism of pain; the interaction of pain and movement. Methodology for assessing

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pain.Chronic pain.Painful behavior.

#### Theme 5. Principles of assessment / diagnosis in physical and rehabilitation medicine

Contents of the topic: Diagnosis of the disease. Clinical diagnostic tools. Functional scales. Biochemical and pathological tests used in the field of physical medicine and rehabilitation. Laboratory research and imaging methods.The rational use of modern methods of medical imaging in physical and rehabilitation medicine.

Clinical tests and scales used in rehabilitation. Clinical and functional studies: standardized / clinical tests; rating scales and questionnaires, measurement results; somato-sensory testing; pose; mobility; reaching out, grabbing and manipulating; testing of general and specific sensitivity; swallowing and nutrition; sexual function; urination control; tissue viability (skin problems and pressure sores); bowel / bladder function; communication (speech, language and non-verbal communication); mood, behavior, personality; general health indicators .; neuropsychological testing (perception, memory, executive functions, attention, etc.). Scales of activity and participation.Scales for the assessment of environmental factors.Scales for assessing professional activities, daily activities.

Various scales, devices, tests and indicators used in physical and rehabilitation medicine.

Instrumental tests (dynamometry: assessment of muscle endurance and strength; electrophysiological testing, etc.). Quantitative assessment by recording mechanical and kinetic phenomena (stabilized platform), as well as movements or kinematics (various modern forms of recording movements of body segments).Electrodiagnostics: electromyography, study of nerve conduction and evoked potentials. Kinematic measurements of gait: assessment of the structure of movement, including temporal and spatial parameters (goniometry / electrogoniometry, ascelometry, optoelectronic systems, digital video camera using specialized software, etc.). Kinetic measurements of gait: assessment of the possibility of overcoming the gravity of the earth (dynamometric platforms, pedobraographic platforms, sensory insoles, portable systems for movement, etc.); surface EMG activity in selected muscles; power engineering. Quantitative assessment of other indicators of equilibrium and mobility (static and dynamic posturography, monitoring of long-term activity, etc.).

#### Theme 6. Physiological and pathophysiological substantiation of the rehabilitation process

The content of the topic:

The concept of adaptation and readaptation.Adaptation of bones to physical activity.Adaptation of bone joints to physical activity. Muscle adaptation to physical activity. Regeneration.Classification (physiological, pathological).Localization.Levels.Morphological manifestations.Outcomes.

Sanogenetic mechanisms of restoration of disturbed or compensation of lost body functions and counteraction to pathological processes in the body.


Bioenergy need for various activities. Food and water-salt regimes and mechanisms of bioenergy supply.

Restoration of movements with damage to the nervous system.The basic principles of the interaction of the functional systems of the body.

Methods of neuro-muscular re-education.System (method) of "proprioceptive neuro-muscular relief".

Mechanisms for the restoration of function in injuries of the spine and spinal cord.

The mechanisms of tissue damage and the development of organ dysfunction (atrophy, spasticity, chronic pain). Adaptation of cells and tissues and improper adaptation (plasticity, molecular mechanisms and mediators).Autonomous regulation.Biological mechanism of interventions (pain, relief, motor training).

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### **Section 3. International classification of functioning and organization of the rehabilitation process**

#### **Theme 1. Legal regulation of medical rehabilitation.**

##### **The content of the topic:**

Legal regulation of medical rehabilitation. The legal basis of medical and social expertise, the formation and implementation of an individual program for the rehabilitation and habilitation of people with disabilities and children with disabilities.

#### **Theme 2. Ethical problems in the rehabilitation process. Doctor and society in the era of the development of new rehabilitation technologies.**

##### **The content of the topic:**

Moral and legal aspects of the ethics of the doctor-patient relationship in rehabilitation. The problem of justice in the provision of rehabilitation services to patients. The right to rehabilitation.

Rights and moral obligations of members of an interdisciplinary rehabilitation team; The moral climate of the multidisciplinary rehabilitation team, partnership, team morale and personal responsibility. Interpersonal, intragroup and intergroup moral conflicts in the process of work as part of a rehabilitation team, ways to resolve and prevent them.

Rehabilitation assistance and rehabilitation service. Commercialization of rehabilitation activities and its impact on the moral climate in the team.

Normative and criteria aspects of morality as an ethical characteristic of health. The ethical essence of life: meaning and purpose. Socio-role aspects of medical ethics.

Cosmetic aspects of medical and social rehabilitation.

Cultural aspects of disability and rehabilitation (cultural influences, social relations, religious beliefs).

#### **Theme 3. ICF in rehabilitation medicine**

Topic content: International Classification of Functioning, Disability and Health (ICF, 2001): creation history, goals, main sections, terminology. Health Factors Medical and social aspects of pathological conditions and disability. Functional state, evaluation criteria. Environmental factors (natural and human-modified, social environment, environmental adaptation options, assistive technologies, aids, levels of individual independence from others).


Modern ideas about the rehabilitation of people with disabilities. The relationship between the development of rehabilitation and the choice of disability model: medical, political, independent life model, medical and social, etc. New approaches to solving the problems of people with disabilities in modern Russia.

#### **Topic 4. Principles of diagnostics at the ICF: assessment of impaired function, structures, activity, participation and environmental factors. Rehabilitation diagnosis**

Topic Content: Domains Structures and Functions. Domains of activity and participation. Realization and capitalism. The role of participants in the rehabilitation process in assessing various ICF domains. Formulation of a rehabilitation diagnosis according to the ICF. Health Questionnaire (WHO). Tests and scales that measure activity and participation.

#### **Theme 5. Technology of application of ICF in rehabilitation.**

Content: Rehabilitation goals. Rules for setting goals for the SMART system. Features of goal setting. The main principles of rehabilitation: planning, continuity, consistency; complexity; integrity; principle of individuality; deployment of rehabilitation potential; the principle of mutual

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adaptation of conditions; conditional completion of rehabilitation and resocialization. The dynamics of the rehabilitation process. Ways of rehabilitation: restorative, replacement, adaptive.

**Theme 6. Practical application of the International Film Festival. The concept of rehabilitation potential and rehabilitation prognosis.**

Content: The concept of an individual rehabilitation program. Features of the practical application of the ICF.

The concept of rehabilitation potential: types, key indicators, assessment.

Rehabilitation forecast. Its determining factors: features of the disease and its consequences, rehabilitation potential, socio-psychological and socio-legal features. A rational combination of various aspects of rehabilitation.

**Theme 7. Individual program of medical rehabilitation.**

Topic content: Individual rehabilitation program: principles of program development, selection of patients for rehabilitation programs. Interaction of doctors of various specialties and non-medical specialists in the system of medical rehabilitation. Opportunities and competencies of a rehabilitation doctor. Interventions in physical and rehabilitation medicine. Rehabilitation equipment. Technical means of rehabilitation.

**Theme 8. Psychological aspects of the MDB**

The content of the topic: Multidisciplinary rehabilitation team. Communicative competence of members of a multidisciplinary team as an important component of the rehabilitation process. Psychological problems of persons with disabilities. The main reasons that interfere with the normal psychological integration of persons with disabilities. Assessment of the psychological status of a disabled person. Psychological traits characteristic of persons with disabilities.

Socio-psychological aspects of the relationship of people with disabilities and healthy people. Types of socio-psychological adaptation of persons with disabilities: actively positive; passively negative; passively positive; actively negative. Ways to solve the psychological problems that arise with people with disabilities: helpline; psychologist consultation; psychological training; self-help groups.

The psychological position of the members of the multidisciplinary team in the process of providing psychological assistance in the rehabilitation process. Patterns of creating a favorable psychotherapeutic environment in a rehabilitation institution.

**Theme 9. Principles of organization of team work of the MDB**

Contents of the topic: Composition of MDBs in rehabilitation.


Teamwork in a professional team, the stage of group dynamics. The basics of conflict management and conflict management strategies.

Time management in the work of the MDB. Strategies for the efficient use of working time.

The ability to self-regulation as a professionally significant characteristic of the personality of a member of the MDB. Methods and methods of self-regulation of the emotional state in members of an interdisciplinary neurorehabilitation team. Functions of a doctor, medical psychologist, physical therapist, occupational therapist, speech therapist, rehabilitation nurse, social worker as part of an interdisciplinary rehabilitation team.

**Theme 10. Restorative education: methodological and theoretical foundations.**

Contents of the topic: The concept of compensatory-adaptive processes. Types, stages. The concept of restoration of higher mental functions by the mechanism of restructuring of functional systems. Means and methods of pedagogical influence on the personality.

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Individual learning conditions (age, level of development, gender characteristics, cognitive style, motivation, etc.). Motivational background of learning. Types of motivation in the rehabilitation process. Ways to increase patient motivation for rehabilitation. Creating a positive statement and image of the goal. Ways to attract attention. Ways to help the student understand the material. Training in mental operations. The formation of psychomotor skills, social behavior skills. Compilation of training programs: checking the availability of preliminary knowledge and skills, providing training motives, visualizing the composition of the activity being formed, determining the requirements for the activity being formed, requirements for the content, form, number and sequence of tasks, presenting training tasks that ensure the achievement of learning goals, control of assimilation, regulation of the assimilation process. Feedback Forms. Training, education, psychocorrection. Their relationship. Educational programs in the family. Family education and family pedagogy.

## 6. TOPICS OF PRACTICAL CLASSES AND SEMINARS

### Section 1. Methodology of physical and rehabilitation medicine

#### Theme 1. Introduction to physical and rehabilitation medicine

##### form: seminar

Issues for discussion:

1. The relevance of rehabilitation for people with disabilities and for society.
2. A new specialty is a doctor of physical and rehabilitation medicine.
3. Goals and results of rehabilitation.
4. Basic principles of rehabilitation.
5. Medical and non-medical rehabilitation in modern healthcare.
6. The main methods and means of rehabilitation.

#### Topic 2. General aspects of the functioning of man and the limitations of his life.

##### form: seminar

Issues for discussion:

1. The human body as a single self-developing and self-regulatory biological system.
2. Environmental factors and their impact on human life.
3. The main categories of human activity.
4. Physical and mental activity of a person.
5. Fatigue and overwork during physical and mental work.

#### Topic 2. General aspects of the functioning of man and the limitations of his life (continued).

##### form: seminar


Issues for discussion:

1. Basic terminological concepts (health, illness, norm, working capacity, working ability, legal capacity, rational labor and household device).
2. The specifics of rehabilitation and adaptation.
3. The concept of disability (disabled person, child with a disability, disability, congenital and acquired disability) and its causes.
4. Limitation of life.

#### Theme 3. Sanological concepts of health assessment.

##### form: seminar

Issues for discussion:

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1. Human health. The problem of the "amount of health."
2. The concept of "lifestyle", its structure and impact on health.
3. Indicators for determining the levels of public health. The system of health levels.
4. The health status of the population and the conditions and factors affecting it.
5. The meaning of the concepts of lifestyle and a healthy lifestyle.
6. Patient health: knowledge, perception and beliefs regarding one's health; condition, its consequences, treatment and preventive options.
7. Attitude to health. The internal picture of health - the internal picture of the disease - the internal picture of treatment.
8. The role of the medical psychologist in carrying out rehabilitation measures.

**Topic 4. The concept of “quality of life” as one of the most important modern areas of research in rehabilitation.**

**form: seminar**

Issues for discussion:

1. Levels of functional abilities, their assessment.
2. The concept of quality of life. P
3. Psychological aspects of maintaining and strengthening mental and somatic human health.
4. Health-related quality of life: objective characteristics and psychological components, optimization paths.
5. Types and forms of social mobility. The influence of the socio-psychological environment on rehabilitation.
6. Psychological problems of people with disabilities, the main reasons that interfere with the normal psychological integration of people with disabilities in society, psychological features characteristic of people with disabilities

**Topic 5. The main differences between rehabilitation and treatment.**

**form: seminar**

Issues for discussion:

1. Model of functioning, disability and health in rehabilitation according to the world health organization.
2. Disability models: medical, social, psychological.
3. Disruption of life and the rehabilitation process.
4. The model of traditional medicine,
5. Models of physical and rehabilitation medicine
6. The process of rehabilitation.

**Theme 6. Biopsychosocial approach to rehabilitation**

**form: seminar**


Issues for discussion:

1. The social essence of man, his health, diseases.
2. Biologizing, cybernizing, energizing, sociologizing and psychologizing definitions of diseases.
3. The role of the patient's personality in the rehabilitation process.
4. Biopsychosocial rehabilitation model.
5. The interaction and manifestation of various factors in the formation of limitations of the patient's capabilities during rehabilitation.

**Theme 6. Biopsychosocial approach to rehabilitation (continued)**

**form: practical master class**



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Issues for discussion:

1. Factors predisposing the onset of disability in the disease: adverse, harmful, pathogenic.
2. The influence of biological, psychological and social factors on the rehabilitation process.
3. Psychological mechanisms for overcoming and compensating for existing defects caused by the disease.
4. The internal picture of disability.
5. Rehabilitation as a complex of various impact measures: medical, social and professional in nature.

## **Section 2. Fundamentals of propaedeutics in physical and rehabilitation medicine.**

### **Topic 1. Examination of neuromuscular, skeletal and motion-related systems.**

**form: seminar**

Issues for discussion:

1. Anatomical and physiological characteristics of the muscles.
2. The kinetic chain. Morphokinesiology analysis of limbs.
3. Functional muscle groups involved in the movements of the head, upper and lower extremities, trunk, and spine. The functions of the muscles of the neck and back with various types of support.
4. Examination technique, symptoms and symptom complexes of motor disorders in the pathology of muscles, neuromuscular apparatus, skeleton.
5. Introduction to manual muscle testing, range of motion, coordination, dexterity.

### **Theme 1. Examination of neuromuscular, skeletal and motion-related systems (continued).**

**form: seminar**

Issues for discussion:

1. Dynamic anatomy of body positions.
2. General structure, classification and characteristics of joint movements.
3. Neurophysiology of posture and movement. Functional system of movements. The main types of locomotor activity (posture, gestures, walking).
4. Diagnosis of motor disorders: complaints, features of the examination.
5. Analysis of posture and movement.
6. Walking as an example of a complex, locomotor, translational, cyclic movement associated with repulsion from a supporting surface.
7. Walking is normal and with pathological changes in the musculoskeletal system.

### **Theme 2. Fundamentals of biomechanical and kinematic diagnostics in the FRM**


**form: seminar**

Issues for discussion:

1. General characteristics and classification of the movements of the human body.
2. Classification of body positions.
3. Characterization of body positions from the standpoint of the laws of mechanics.
4. The characteristics of the muscles of the trunk, upper and lower extremities. Features of the functioning of organs and support systems in unnatural positions of the body.
5. The effect of movements on the motor apparatus, internal organs, coordination of movements.

### **Theme 2. Fundamentals of biomechanical and kinematic diagnostics in the FRM**



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**form of carrying out: practical master class**

Issues for discussion:

1. The sequence (algorithm diagram) of the anatomical analysis of the positions and movements of a person (according to MF Ivanitsky).
2. Analysis of walking in the rehabilitation process.
3. The effect of exercise on the spinal column and chest.
4. Biomechanics of various tissues in the human body (in particular the musculoskeletal system).

**Topic 3: Investigation of the functions of the cardiovascular and respiratory systems for rehabilitation.**

**form: seminar**

Issues for discussion:

1. Anatomical and physiological characteristics of the cardiovascular and respiratory systems.
2. Basic physiological mechanisms to ensure motor activity. The impact of physical training on the blood, circulatory system, metabolism.
3. The value and functionality of breathing.
4. Physiological costs, cardiovascular and pulmonary effects of physical activity.
5. The main characteristics of the adaptation of the respiratory system to motor activity. The main characteristics of the adaptation of the cardiovascular system to motor activity.
6. Methodology for the diagnosis of impaired exercise tolerance. Easy functional tests.
7. Functional testing of the cardiovascular system, oxygen saturation, exercises with graduated load.

**Topic 4. The study of mental and sensory functions, the functions of voice and speech.**

**form: seminar**

Issues for discussion:

1. Anatomical and physiological features of the functioning of the brain.
2. The basic postulates of the theory of functional systems and their use in the rehabilitation process.
3. The anatomical relationship of sensory systems, structures of the brain and spinal cord and musculoskeletal system.
4. Global and specific mental functions, methods of their assessment. Symptoms and symptom complexes of violations.
5. Assessment of cognitive skills, language and speech, memory, behavior.

**Topic 4. The study of mental and sensory functions, the functions of voice and speech (continued).**


**form: seminar**

Issues for discussion:

1. Anatomical and physiological characteristics of the organs of vision, hearing and balance. Symptoms and symptom complexes of violations.
2. Features of communication with patients suffering from impaired sensory functions.
3. The mechanism of pain; the interaction of pain and movement. Methodology for assessing pain.
4. Chronic pain. Painful behavior. Ways of exposure.

**Topic 5. Principles of assessment / diagnosis in physical and rehabilitation medicine.**

**form: seminar**

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Issues for discussion:

1. Clinical diagnostic tools. Functional scales. Biochemical and pathological tests used in the field of physical medicine and rehabilitation.
2. The rational use of modern methods of medical imaging in physical and rehabilitation medicine.
3. Clinical tests and scales used in rehabilitation.
4. Scales of activity and participation.
5. Scales for the assessment of environmental factors.
6. Scales for assessing professional activities, daily activities.
7. Various scales, instruments, tests and indicators used in physical and rehabilitation medicine.

**Theme 6. Physiological and pathophysiological substantiation of the rehabilitation process**

**form: seminar**

Issues for discussion:

1. The concept of adaptation and readaptation.
2. Adaptation of various organs and systems to physical activity.
3. Regeneration. Classification (physiological, pathological).
4. Sanogenetic mechanisms of restoration of disturbed or compensation of lost body functions and counteraction to pathological processes in the body.
5. Bioenergy need for various activities.
6. Food and water-salt regimes and mechanisms of bioenergy supply.

**Theme 6. Physiological and pathophysiological substantiation of the rehabilitation process (continued)**

**form: seminar**

Issues for discussion:

1. Restoration of movements in case of damage to the nervous system. The basic principles of the interaction of the functional systems of the body.
2. Methods of neuro-muscular re-education. System (method) of "proprioceptive neuro-muscular relief".
3. Mechanisms for the restoration of function in injuries of the spine and spinal cord.
4. Mechanisms of tissue damage and the development of organ dysfunction (atrophy, spasticity, chronic pain).
5. The biological mechanism of interventions (pain, relief, motor training).

**Section 3. International classification of functioning and organization of the rehabilitation process**

**Theme 1. Legal regulation of medical rehabilitation.**


**form: seminar**

Issues for discussion:

1. Legal regulation of medical rehabilitation.
2. The legal basis for medical and social expertise, the formation and implementation of an individual program for the rehabilitation and habilitation of people with disabilities and children with disabilities.

**Theme 2. Ethical problems in the rehabilitation process. Doctor and society in the era of the development of new rehabilitation technologies.**

**form of conduct: training**

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Issues for discussion:

1. The moral and legal aspects of the ethics of the doctor-patient relationship in rehabilitation.
2. The problem of justice in the provision of rehabilitation services to patients. The right to rehabilitation.
3. Rehabilitation assistance and rehabilitation service.
4. Commercialization of rehabilitation activities and its impact on the moral climate in the team.
5. Normative and criteria aspects of morality as an ethical characteristic of health.
6. Social-role aspects of medical ethics.

### **Theme 3. ICF in rehabilitation medicine**

**form: seminar**

Issues for discussion:

1. International classification of functioning, disability and health (ICF, 2001): history of creation, goals, main sections, terminology.
2. Medical and social aspects of pathological conditions and disability.
3. Environmental factors (natural and man-made, social environment, environmental adaptation options, assistive technologies, assistive devices, levels of individual independence from others).
4. New approaches to solving the problems of people with disabilities in modern Russia.

### **Topic 4. Principles of diagnostics in the ICF: assessment of impaired function, structures, activity, participation and environmental factors. Rehabilitation diagnosis**

**form of carrying out: practical master class**

Issues for discussion:

1. Domains of structure and function.
2. Domains of activity and participation. Implementation and capitalism.
3. The role of participants in the rehabilitation process in assessing the various domains of the ICF.
4. The formulation of the rehabilitation diagnosis according to the ICF.
5. Health Questionnaire (WHO).
6. Tests and scales that measure activity and participation.

### **Theme 5. Technology of application of ICF in rehabilitation.**

**form of carrying out: practical master class**


Issues for discussion:

1. Objectives of rehabilitation.
2. Rules for the formulation of goals for the SMART system. Features of goal setting.
3. The basic principles of rehabilitation: planning, continuity, consistency; complexity; integrity; principle of individuality; deployment of rehabilitation potential; the principle of mutual adaptation of conditions; conditional completion of rehabilitation and resocialization.
4. The dynamics of the rehabilitation process.
5. Ways of rehabilitation: restorative, replacement, adaptive.

### **Theme 6. Practical application of the International Film Festival. The concept of rehabilitation potential and rehabilitation prognosis.**

**form of carrying out: practical master class**

Issues for discussion:

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1. The concept of an individual rehabilitation program.
2. Features of the practical application of the ICF.
3. The concept of rehabilitation potential: types, key indicators, assessment.
4. Rehabilitation forecast.
5. Factors determining it: features of the disease and its consequences, rehabilitation potential, socio-psychological and socio-legal features.
6. A rational combination of various aspects of rehabilitation.

**Theme 7. Individual program of medical rehabilitation.**

**form: seminar**

Issues for discussion:

1. Individual rehabilitation program: principles of program development, selection of patients for rehabilitation programs.
2. Interaction of doctors of various specialties and non-medical specialists in the system of medical rehabilitation.
3. Opportunities and competencies of a rehabilitologist.

**Theme 7. Individual program of medical rehabilitation.**

**form of carrying out: practical master class**

Issues for discussion:

1. The practice of compiling an individual rehabilitation program.
2. Interventions in physical and rehabilitation medicine.
3. Equipment for rehabilitation.
4. Technical means of rehabilitation.

**Theme 8. Psychological aspects of the MDB**

**form of carrying out: practical master class**

Issues for discussion:

1. A multidisciplinary rehabilitation team.
2. Communicative competence of members of a multidisciplinary team as an important component of the rehabilitation process.
3. Psychological problems of persons with disabilities.
4. Socio-psychological aspects of the relationship of people with disabilities and healthy people.
5. The psychological position of the members of the multidisciplinary team in the process of providing psychological assistance in the rehabilitation process.


**Theme 9. Principles of organization of team work of the MDB**

**form of carrying out: practical master class**

Issues for discussion:

1. The composition of the MDB in rehabilitation.
2. Teamwork in a professional team, the stage of group dynamics.
3. Time management in the work of the MDB. Strategies for the efficient use of work time.
4. Methods and methods of self-regulation of the emotional state of members of the interdisciplinary neurorehabilitation team.
5. Functions of a doctor, medical psychologist, physical therapist, occupational therapist, speech therapist, rehabilitation nurse, social worker as part of an interdisciplinary rehabilitation team.

**Theme 10. Restorative education: methodological and theoretical foundations.**

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**form: seminar**

Issues for discussion:

1. The concept of compensatory-adaptive processes. Types, stages.
2. The concept of restoration of higher mental functions by the mechanism of restructuring of functional systems.
3. Means and methods of pedagogical influence on the personality.
4. Ways to increase patient motivation for rehabilitation.
5. Ways to attract attention.
6. The formation of psychomotor skills, social behavior skills.
7. Preparation of training programs: checking the availability of preliminary knowledge and skills, providing training motives, visualizing the composition of the activity being formed, determining the requirements for the activity being formed, requirements for the content, form, quantity and sequence of tasks, presenting educational tasks to ensure the achievement of learning objectives , control of assimilation, regulation of the assimilation process.

**7. LABORATORY CLASSES**

*This type of work is not provided by the curriculum.*


**8. TOPICS OF TERM PAPERS, TESTS, AND RESEARCH PAPERS**

**Sample topics of essays**

1. The history of the development of domestic and foreign rehabilitology.
2. Psychology of the rehabilitation process.
3. Modern concepts of health and disease.
4. Personality in terms of rehabilitation.
5. Cosmetic aspects of medical and social rehabilitation.
6. Cultural aspects of disability and rehabilitation (cultural influences, public relations, religious beliefs).
7. Psychological problems of persons with disabilities.
8. The basics of conflict management and conflict resolution strategies.
9. The formation of psychomotor skills, social behavior skills.
10. Drawing up training programs in rehabilitation.
11. The ability to self-regulation as a professionally significant characteristic of the personality of a member of the MDB.
12. Types of socio-psychological adaptation of persons with disabilities
13. Ways to solve psychological problems that arise in people with disabilities.
14. Patterns of creating a favorable psychotherapeutic environment in a rehabilitation institution.
15. The role of the family in the rehabilitation process.
16. Modern views on the rehabilitation of persons with disabilities. The relationship between the development of rehab lithology and the choice of a disability model: medical, political, an independent life model, medical and social, etc.

The purpose of writing an abstract: to teach literary analysis skills, to be able to formulate their worldview position, to master the skill of critical analysis.

Requirements for the volume and design of abstracts: The volume of 10-15 pages, including the face page, content, body of the abstract, list of used literature. Pages of the abstract should be numbered, excluding the front.


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## **9. QUESTIONS FOR EXAM ON DISCIPLINE "BIOPSYCHOSOCIAL APPROACH TO MEDICAL REHABILITATION"**

**A numbered list of questions for the exam is given.**

1. The concept of neurorehabilitation.
2. Specifics of the psychological approach to the study of human health.
3. Principles of rehabilitation with transient ischemic attack
4. The stages of rehabilitation.
5. Scales used in neurorehabilitation.
6. The Rankin Scale.
7. Scale routing (SHRM).
8. Exercise therapy methods used in neurorehabilitation.
9. The concept of verticalization.
10. physical therapy Methods used in neurorehabilitation.
11. Principles of rehabilitation of patients with peripheral nervous system damage.
12. Principles of rehabilitation of patients with acute myocardial infarction.
13. Stages of rehabilitation of patients with acute myocardial infarction.
14. methods of physical therapy and physical therapy used for cardiorehabilitation.
15. Principles of rehabilitation of patients with arterial hypertension.
16. The stages of rehabilitation. patients with arterial hypertension.
17. Principles of rehabilitation of patients with CHD.
18. Exercise tests used to diagnose the state of the CCC.
19. Principles of medical rehabilitation.
20. Evaluation of the effectiveness of the treatment.
21. Methods of research of human physical development
22. Methods for studying the functional state of a person.
23. The influence of physical activity on the body
24. The concept of rehabilitation potential, to define.
25. List the types of rehabilitation potential.
26. international classification of functioning, disability and health (ICF). Brief characteristic.
27. Difference from ICD. Evaluation of the state functions according to functional classes
28. Methods and means of medical rehabilitation.
29. Problems of evaluating the effectiveness of psychological intervention.
30. Problems of mental adaptation and compensation.
31. The influence of somatic diseases on the psychic activity of man
32. Internal picture of the disease as a complex psychosomatic phenomenon.
33. Phenomenology of corporeality. Boundaries of the body, stability of the body image, forms of body identity. External and internal body, semantics of "internal" corporeality.
34. Directions, forms and methods of psychological intervention.
35. Specifics of psychological intervention, taking into account nosological, syndromic, socio-demographic, cultural and individual psychological characteristics;
36. Psychological assistance in extreme and crisis situations.
37. The main models of psychosomatic symptomogenesis based on the concept of "physiological" and "psychological" stress.
38. Biological and environmental risk factors for disorders of mental development and deviant behavior.
39. Types of rehabilitation, a brief description of them.
40. Contraindications for the use of methods and means of medical rehabilitation.
41. Health psychology, factors of a healthy lifestyle and attitude to health.



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- 42 . Psychological aspects of preservation and strengthening of physical and mental health of the person.
43. the concept of rehabilitation, give a definition. The concept of medical rehabilitation, give a definition.
44. Stages of medical rehabilitation. Places of rehabilitation activities.
- 45 . The concept of a multidisciplinary team, brief description.
46. draft Laws regulating medical rehabilitation.
- 47 . The concept of rehabilitation diagnosis, give a definition

## 10.SELF-STUDY WORK OF STUDENTS

**The content, requirements, conditions and procedure for organizing students 'independent work, taking into account the form of training, are determined in accordance with the "Regulation on the organization of students' independent work", approved by the Academic Council of UISU (protocol No. 8/268 of March 26, 2019).**

### Full-time form of education

Title of sections and topics	Type of self-study work (study of educational material, problem solving, abstract, report, test, preparation for pass test, examination, etc.)	Volume in hours	Form of control (verification of problem solving, abstract, etc.)
Introduction to physical and rehabilitation medicine	Writing an essay "Current state of the problem of rehabilitation "	1	Tests. Survey on the topic
General aspects of human functioning and limitations of its vital activity	Report" Variability of possible approaches to understanding health and disease "	1	Tests.Survey on the topic
Phonological concepts of health assessment	Abstract" Modern understanding of the rehabilitation process "	1	Tests.Survey on the topic
The concept of "quality of life" as one of the most important modern research areas in rehabilitation	Control work" Comparative characteristics of psychological protection mechanisms and coping strategies. "	1	Tests.Survey on the topic
The main differences between rehabilitation and treatment	preparation of the report" Basic approaches to health restoration»	1	Tests.Survey on the topic
Biopsychosocial approach to rehabilitation	Preparation of the training project "Biopsychosocial model of rehabilitation"	1	Tests.Survey on the topic
Examination of neuromuscular, skeletal, and motion-related systems.	solving situational problems, testing	1	Tests.Survey on the topic
Fundamentals of biomechanical and kinematic diagnostics in the FORMAT	solving situational problems, testing	1	Tests.Survey on the topic



Study of the functions of the cardiovascular and respiratory systems for rehabilitation purposes.	The decision of situational tasks, test	1	Tests.Survey on the topic
Research of mental and sensory functions, voice and speech functions.	The decision of situational tasks, test	1	Tests.Survey on the topic
ICF in rehabilitation medicine	Study of domains of the international classification of functioning	1	Tests.Survey on the topic
Technology of using ICF in rehabilitation.	The decision of situational tasks, test	1	Tests.Survey on the topic
An individual program of medical rehabilitation.	Preparation of the training project " Individual rehabilitation program»	1	Tests.Survey on the topic

## 11. EDUCATIONAL, METHODOLOGICAL AND INFORMATION SUPPORT OF DISCIPLINE

### List of recommended literature

#### a) Core reading

1. Medical rehabilitation. Ed. A.V. Epifanova, E.E. Achkasova, V.A. Epifanova. Publishing house GEOTAR-Media, 2015 - 672 p.
2. Epifanov V.A. Reconstructive medicine. Publishing house GEOTAR-Media, 2013 - 304 p.
3. Medical rehabilitation: textbook / G. N. Ponomarenko-M.: GEOTAR-Media, 2014.
4. Rehabilitation in traumatology: guide / Epifanov V. A., Epifanova.V. - M.: GEOTAR-Media, 2010. - (Series "Library of a specialist doctor").
5. Rehabilitation in neurology / Epifanov V. A., Epifanov A.V.-M.: GEOTAR-Media, 2015. - (Library of a specialist doctor).
6. Rehabilitation for respiratory diseases / Malyavin A. G., Epifanov V. A., Glazkova I. I.-M.: GEOTAR-Media, 2010. - (series "Library of a specialist doctor").


#### b) Supplementary reading

Clinical recommendations of the "Union of rehabilitation specialists of Russia" are freely available on the website <http://rehabrus.ru> (<http://rehabrus.ru/materialyi/normativnaya-baza-i-klinicheskie-rekomendaczii/>)

- 1) "Diagnosis and treatment of dysphagia in diseases of the Central nervous system".
- 2) " Verticalization of patients in the rehabilitation process»
- 3) "Postural correction in the rehabilitation of patients with focal brain injuries "
- 4)" Safe movement of patients»
- 5) " Rehabilitation for knee replacement»
- 6) " Rehabilitation for hip replacement in a specialized Department of a hospital»
- 7) " Coronary artery bypass grafting in CHD patients: rehabilitation and secondary prevention»

Agreed:



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process, available on the official website of the Ulyanovsk State University in the section "Information about the educational organization".

Technical means:

1. Classroom board
2. Educational visual aids, tables and slides in the specialty; videos
3. Workplace for the teacher
4. Personal computer, office equipment, audio, video library.
5. Presentations on lecture topics;
6. Educational videos:
  - Dangerous method;
  - Air Force - the functioning of the brain.
7. Educational technology:

Simulation technologies: role-playing games: "Communication training in the doctor-patient dyad; relaxation techniques: Training in self-regulation methods.

Non-simulation technologies: multimedia presentations; compilation of a psychological and behavioral portrait.


### **13. SPECIAL CONDITIONS FOR STUDENTS WITH REDUCED HEALTH OPPORTUNITIES**

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


- for persons with visual impairment: in print in large print; in the form of an electronic document; in the form of an audio file (translation of training materials into audio format); in printed form in Braille; individual consultations involving an interpreter; individual tasks and consultations;
- for persons with hearing impairment: in print; in the form of an electronic document; video materials with subtitles; individual consultations involving an interpreter; individual tasks and consultations;
- for persons with disorders of the musculoskeletal system: in print; in the form of an electronic document; in the form of an audio file; individual tasks and consultations.

If it is necessary to use partially/exclusively distance learning technologies in the educational process, the organization of work of teaching staff with students with disabilities and disabilities is provided in an electronic information and educational environment, taking into account their individual psychophysical characteristics.



Creator




Associate Professor Pavlova J.M.

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**LIST OF CHANGES of  
Educational plan of discipline ” Biopsychosocial approach to medical rehabilitation”  
Speciality 31.05.01. «General medicine»**

<b>№</b>	<b>Content of the change or a link to the attached text of the</b>	<b>Full name of the head of the Department developing the discipline</b>	<b>Signature</b>	<b>Date</b>
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	Sabitov I.A.		31.08.2022
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	Sabitov I.A.		31.08.2022

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Appendix 1

**11. EDUCATIONAL, METHODOLOGICAL AND INFORMATION SUPPORT OF DISCIPLINE «BIOPSYCHOSOCIAL APPROACH TO MEDICAL REHABILITATION»**

**a) List of recommended literature**

**Core reading**

1. 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>
2. Margaret A. Turk; Nancy R. Mudrick. Rehabilitation Interventions Series: SAGE Reference Series on Disability: Key Issues and Future Directions. Thousand Oaks, Calif : SAGE Publications, Inc. 2013. eBook. <https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=525900&site=ehost-live&scope=site>

**Additional literature:**

1. Andrew Gree; Roman Hayda. Postoperative Orthopaedic Rehabilitation [Place of publication not identified] : Wolters Kluwer Health. 2017. eBook. <https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=1922097&site=ehost-live&scope=site>
2. Richard D. Zorowitz, MD; Richard L. Harvey, MD; Joel Stein, MD; Carolee J. Winstein, Phd, PT; George Wittenberg, MD, PhD. Stroke Recovery and Rehabilitation Edition: Second edition. New York : Demos Medical. 2015. eBook. <https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=842474&site=ehost-live&scope=site>

**Educational and methodical literature:**

1. Grischuk D. V. Guide for student independent work on the discipline «Biopsychosocial approach to medical rehabilitation» for specialty 31.05.01 «General medicine» / D. V. Grischuk, S. V. Yarzutkin; Ulyanovsk State University. - Ulyanovsk : Ulsu, 2022. - 20 p. - Неопубликованный ресурс; На англ. яз. - Режим доступа: ЭБС УлГУ. - Текст : электронный. URL: <http://lib.ulsu.ru/MegaPro/Download/MObject/13102>.

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*Main Librarian* *Смагальников Стас* *12.05.2022*


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## Appendix 2

### *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: <https://www.studentlibrary.ru/cgi-bin/mb4x>. – 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: <https://www.rosmedlib.ru>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

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

1.8. Clinical Collection : научно-информационная база данных EBSCO // EBSCOhost : [портал]. – URL: <http://web.b.ebscohost.com/ehost/search/advanced?vid=1&sid=9f57a3e1-1191-414b-8763-e97828f9f7e1%40sessionmgr102>. – 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.action-media.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: <https://ebsco.smartimagebase.com/?TOKEN=EBSCO-1a2ff8c55aa76d8229047223a7d6dc9c&custid=s6895741>. – Режим доступа : для авториз. пользователей. – Изображение : электронные.

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**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:

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