

*Summary of the working program of the academic discipline*

**« Medical rehabilitation. Exercise therapy »**

General Educational Program of higher education (specialist's degree programs)

**31.05.01 General Medicine**

Department: **Medical Rehabilitation**

**1. The purpose of mastering the discipline** – *participation in the formation of relevant competencies GPC-8, PC – 8.*

**2. Position of the academic discipline in the structure of the General Educational Program (GEP).**

**2.1.** The discipline refers to the core part *core part of Block I of GEP HE*. The discipline is taught in 7th and 8th semester /4th year of study.

**3. Deliverables of mastering the academic discipline and metrics of competence acquisition**

Mastering the discipline aims at acquiring the following universal (UC) or/and general professional (GPC) or/and professional (PC) competencies

| № | Competence code | The content of the competence (or its part)  | Code and name of the competence acquisition metric | As a result of mastering the discipline, the students should:  |  |   |
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|   |                 |  |  | know   | be able to   | possess   |
| 1 | GPC-8           | Able to implement and monitor the effectiveness of the patient's medical rehabilitation, including the implementation of individual rehabilitation and habilitation programs for the disabled, to assess the patient's ability to work |  | Procedures for organizing medical rehabilitation, including the implementation of individual programs for the rehabilitation and habilitation of disabled people; methods of medical rehabilitation of the patient, including the implementation of individual | Develop an action plan for the medical rehabilitation of patients, including the implementation of individual programs for the rehabilitation and habilitation of disabled people, in accordance with the current procedures for organizing medical rehabilitati | Practical experience: drawing up a plan of measures for the medical rehabilitation of a patient, including the implementation of individual programs for the rehabilitation and habilitation of disabled people, in accordance with the current procedure for medical rehabilitation, clinical recommendations, taking into account |

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|  |  |  |  | <p>rehabilitation and habilitation programs for disabled people, medical indications and medical contraindications for their implementation, taking into account the diagnosis in accordance with the current procedures for organizing medical rehabilitation, clinical recommendations, taking into account the standards of medical care; ways to prevent or eliminate complications, side effects, adverse reactions, including serious and unforeseen, resulting from medical</p> | <p>on, clinical recommendations, taking into account the standards of medical care; determine medical indications for medical rehabilitation measures in accordance with the current procedure for organizing medical rehabilitation, clinical recommendations, taking into account the standards of medical care; evaluate the effectiveness and safety of measures for the medical rehabilitation of patients, including the implementation of individual programs for the rehabilitation and habilitation of disabled people;</p> | <p>the standards of medical care; carrying out medical rehabilitation measures for patients, including the implementation of individual programs for the rehabilitation and habilitation of disabled people, in accordance with the current procedure for organizing medical rehabilitation, clinical recommendations, taking into account the standards of medical care; evaluation of the effectiveness and safety of measures for the medical rehabilitation of patients, including the implementation of individual programs for the rehabilitation and habilitation of disabled people;</p> |
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|  |  |  |  | rehabilitati<br>on<br>measures;<br>procedure<br>for<br>examinatio<br>n of<br>temporary<br>disability<br>and signs<br>of<br>temporary<br>disability<br>of the<br>patient;<br>procedure<br>for<br>examinatio<br>n of<br>temporary<br>disability<br>and signs<br>of<br>temporary<br>disability<br>of the<br>patient;<br>signs of<br>persistent<br>impairmen<br>t of body<br>functions<br>due to<br>diseases,<br>consequen<br>ces of<br>injuries or<br>defects | for the<br>rehabilitati<br>on and<br>habilitatio<br>n of<br>disabled<br>people, in<br>accordance<br>with the<br>current<br>procedure<br>for<br>organizing<br>medical<br>rehabilitati<br>on, clinical<br>recommen<br>dations,<br>taking into<br>account<br>the<br>standards<br>of medical<br>care;<br>determine<br>signs of<br>temporary<br>disability<br>and signs<br>of<br>permanent<br>impairmen<br>t of body<br>functions<br>due to<br>diseases,<br>consequen<br>ces of<br>injuries or<br>defects |  |
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| 2 | PC-8 | <p>Able to develop a treatment plan for a disease or condition and prescribe drugs, medical devices, clinical nutrition and non-drug treatment, taking into account the diagnosis, age and clinical picture in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care, taking into account standards of medical care and evaluate the effectiveness and safety of the use of medicines, medical devices, clinical nutrition and other methods of treatment</p> |  | <p>Classes and categories of violations of functions, structures of the human body violations of the functions and structures of the human body<br/> Methods of conducting and algorithm for selecting special functional tests, tests and scales for patients with disabilities, impaired functions and structures of the body<br/> Methodology for formulating a rehabilitation on diagnosis and rehabilitation on potential<br/> Methods for</p> | <p>Develop an action plan for the medical rehabilitation of patients, including the implementation of individual programs for the rehabilitation and habilitation of disabled people, in accordance with the current procedures for organizing medical rehabilitation, clinical recommendations, taking into account the standards of medical care; determine medical indications for medical rehabilitation measures in accordance with the current procedure for</p> | <p>Practical experience: drawing up a plan of measures for the medical rehabilitation of a patient, including the implementation of individual programs for the rehabilitation and habilitation of disabled people, in accordance with the current procedure for medical rehabilitation, clinical recommendations, taking into account the standards of medical care; carrying out medical rehabilitation measures for patients, including the implementation of individual programs for the rehabilitation and habilitation of disabled people, in accordance with the current procedure for</p> |
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|  |  |  |  | <p>analyzing the need for the appointment of technical means of rehabilitation and assistive technologies for patients with disabilities, impaired functions and structures of the body</p> <p>Techniques for analyzing the environment (at home, in an apartment, at a workplace, in a medical organization) of patients with disabilities, impaired functions and structures of the body</p> <p>International classification of functioning, disability</p> | <p>organizing medical rehabilitation, clinical recommendations, taking into account the standards of medical care;</p> <p>evaluate the effectiveness and safety of measures for the medical rehabilitation of patients, including the implementation of individual programs for the rehabilitation and habilitation of disabled people;</p> <p>organizing medical rehabilitation, clinical recommendations, taking into account the standards of medical care;</p> <p>organizing medical rehabilitation, clinical recommendations, taking into account the standards of medical care;</p> |
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|  |  |  |  | and health | care;<br>determine<br>signs of<br>temporary<br>disability<br>and signs<br>of<br>permanent<br>impairment<br>of body<br>functions<br>due to<br>diseases,<br>consequences<br>of<br>injuries or<br>defects |  |
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#### 4. Volume of the academic discipline and types of academic work

Total labor intensity of the discipline is 3,1 CU (111.6 AH)

| Type of educational work                | Labor intensity             |                               | Labor intensity (AH) in semesters |             |
|---|-----------------------------|-------------------------------|-----------------------------------|-------------|
|   | volume in credit units (CU) | volume in academic hours (AH) | 7                                 | 8           |
|   |                             |                               |                                   |             |
| Classroom work, including               | 1,8                         | 66                            | 52                                | 14          |
| Lectures (L)                            | 0.4                         | 14                            | 12                                | 2           |
| Laboratory practicum (LP)*              | -                           | -                             | -                                 |             |
| Practicals (P)                          | 1.4                         | 52                            | 40                                | 12          |
| Seminars (S)                            | -                           | -                             | -                                 |             |
| Student's individual work (SIW)         | 1.2                         | 42                            | 30                                | 12          |
| Mid-term assessment                     |                             |                               |                                   |             |
| credit/exam ( <i>specify the type</i> ) | 0.1                         | 3.6                           | -                                 | 3.6         |
| <b>TOTAL LABOR INTENSITY</b>            | <b>3.1</b>                  | <b>111,6</b>                  | <b>82</b>                         | <b>29.6</b> |

#### 5. Sections of the academic discipline and competencies that are formed

| No | Competence code | Section name of the discipline | The content of the section in teaching units |
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|  | GPC-8<br>PC-8 | General issues of rehabilitation.<br>Methods and means of medical rehabilitation.   | General principles of rehabilitation The order of organization of medical rehabilitation.<br>Methods and means of medical rehabilitation. Features of examination in medical rehabilitation. Assessment of physical development. Goniometry. Assessment of the state of the musculoskeletal system. Evaluation of the functional state and rehabilitation capabilities of patients at the stages of medical rehabilitation. Functional stress tests. Definition of rehabilitation potential. The main scales and questionnaires used in medical rehabilitation.<br>International concept of functioning, disability and health.<br>International classification of functioning.  |
|  | GPC-8<br>PC-8 | Fundamentals of physiotherapy.<br>Therapeutic application of electromagnetic, mechanical and thermal factors in the system of medical rehabilitation. | Modern concepts of physiotherapy. Basic principles of therapeutic use of physical factors.<br>Methods of therapeutic application of physiotherapeutic factors of direct and alternating current, pulsed electrotherapy. Indications and contraindications. Features of preparing a patient for procedures, an indicative basis for actions during the execution of procedures.<br>Methods of therapeutic application of physiotherapeutic factors of high-frequency, ultra-high-frequency and microwave therapy.<br>Magnetotherapy. Therapeutic application of mechanical factors of electromagnetic nature. Methods of therapeutic use of physiotherapeutic factors: optical radiation, artificial aerodisperse media. Water, mud, heat treatment. Spa treatment. |
|  | GPC-8<br>PC-8 | General principles of exercise therapy.<br>The place of exercise therapy in the system of medical rehabilitation.                                     | General principles exercise therapy. Means of exercise therapy, features of the exercise therapy method. Schemes for constructing therapeutic gymnastics procedure. Classification of therapeutic exercises.<br>Manifestations of immobilization (bed-rest) syndrome, changes in body systems.<br>Exercise therapy for injuries of the musculoskeletal system with injuries of the limbs, with uncomplicated fractures of the spine.<br>Massage. The mechanism of the effect of massage on the body.<br>General rules of massage. Basic types and techniques of massage.   |
|  | GPC-8<br>PC-8 | Features of medical rehabilitation of certain categories of patients and disabled people.   | Medical rehabilitation of patients with respiratory diseases.<br>Medical rehabilitation of patients with cardiovascular diseases.<br>Medical rehabilitation of patients with diseases of the nervous system.<br>Medical rehabilitation for injuries of the musculoskeletal system: limbs, uncomplicated fracture of the spine.<br>Medical rehabilitation of patients with joint diseases, nonspecific neck and back pains.   |