

Міністерство освіти і науки України
Національний університет водного господарства та
природокористування
Кафедра іноземних мов

06-09-69М

**МЕТОДИЧНІ ВКАЗІВКИ
ТА НАВЧАЛЬНІ ЗАВДАННЯ**

для практичних занять і самостійної роботи з навчальної
дисципліни «Іноземна мова з професійним спілкуванням
(англійська)» для здобувачів вищої освіти другого
(магістерського) рівня за освітньо-професійною програмою
«Фізична терапія» спеціальності 227 «Фізична терапія,
ерготерапія» денної та заочної форм навчання

Рекомендовано
науково-методичною
радою з якості ННІОЗ
Протокол № 1
від 06.09.2022 р.

Рівне – 2022

Методичні вказівки та навчальні завдання для практичних занять і самостійної роботи з дисципліни «Іноземна мова з професійним спілкуванням (англійська)» для здобувачів вищої освіти другого (магістерського) рівня за освітньо-професійною програмою «Фізична терапія» спеціальності 227 «Фізична терапія, ерготерапія» денної та заочної форм навчання [Електронне видання] / Літвінчук А. Т. – Рівне : НУВГП, 2022. – 41 с.

Укладач: Літвінчук А. Т., к.пед.н., доцент кафедри іноземних мов.

Відповідальний за випуск:

Купчик Л. Є., завідувач кафедри іноземних мов

Керівник освітньої програми:

Нестерчук Н. Є.

© Літвінчук А. Т., 2022
© Національний університет
водного господарства та
природокористування, 2022

Вступ

Навчальна дисципліна «Іноземна мова з професійним спілкуванням» є невід’ємною складовою формування загальних і спеціальних компетентностей здобувачів другого (магістерського) рівня вищої освіти, необхідних для життя і професійної діяльності в сучасному глобалізованому суспільстві. Формування англомовної комунікативної компетентності дозволить розвивати у студентів здатність комунікувати з міжнародною науковою і професійною спільнотою, здатність використовувати іншомовні джерела для власного професійного розвитку, аналізувати, критично мислити, тощо.

Ці методичні вказівки та навчальні завдання спрямовані на:

- формування професійної лексичної компетентності та напрацювання функціональних мовленнєвих структур для здійснення англомовної професійної комунікації;
- поглиблення навичок читання, перекладу, критичного аналізу англомовних фахово-орієнтованих текстів;
- формування стратегій пошуку, аналізу та інтерпретації англомовної професійної і наукової інформації,
- вивчення основ академічного письма, структурних, мовних і комунікативних особливостей різножанрових текстів, зокрема наукових, публіцистичних, технічних;
- практичне оволодіння мовними навичками для підготовки презентацій, коментування даних, відповідей на питання під час дискусій з теми фаху.

Методичні вказівки та навчальні завдання складаються з шести фахово-орієнтованих змістових розділів, які містять необхідний лексичний мінімум і завдання для його актуалізації, фахово-орієнтовані тексти й завдання для розвитку професійного усного та письмового мовлення, містять покликання для роботи з автентичним текстовим і відеоматеріалом, а також завдання із розвитку навичок підготовки презентацій.

LEAD-IN

Answer the following questions:

1. Tell about yourself and the past experiences you have relevant to the role of a physical therapist?
2. How long have you been interested in physical therapy and why are you interested in it?
3. What led you to pursue physical therapy as a career?
4. What are your special interests in physical therapy, if any?
5. What establishment do you want to work for as a physical therapist? Do you want to be self-employed?
6. In your opinion, what are the necessary skills and qualities needed to be a physical therapist?

PART I BODY SYSTEMS. ESSENTIALS OF REHABILITATION.

UNIT 1. BODY SYSTEMS

Task 1. Watch the video from the National Geographic about the body systems to learn the essentials
<https://www.youtube.com/watch?v=Jpk5GX5Dj60>.

Task 2. Read the article. Make notes with the key facts and terms to each of the systems described and get ready to speak about one of them:

Body systems are groups of organs and tissues that work together to perform important jobs for the body. Some organs may be part of more than one body system if they serve more than one function. Other organs and tissues serve a purpose in only one body system. All body systems are necessary for a complex organism to be able to survive and reproduce.

Respiratory System

The respiratory system facilitates gas exchange between cells and the environment. The structures involved include the nasal passage,

the trachea, and the lungs.

The respiratory system takes oxygen from the environment to be used throughout the body. In humans, oxygen is taken into the body by the lungs, where it rapidly diffuses into the blood.

It could be argued that the respiratory system is one of the body's most important. Without oxygen to fuel cellular respiration, cells begin to die within minutes. This is the primary reason that heart attacks are deadly. Although the heart is part of the circulatory system, not the respiratory system, it is responsible for transporting oxygen from the lungs to our cells. When the circulatory system stops working, our tissues begin to die from lack of oxygen.

Digestive System

The digestive system ingests food and breaks it down into usable nutrients before excreting solid waste products. It includes the mouth, esophagus, stomach, and intestines.

The digestive system takes in food and processes it to obtain useful nutrients that the body can use for fuel. Carbohydrates, proteins, and fats can all be used by our cells to obtain the energy they need to stay alive and carry out their functions.

When food enters the body, it is first chewed by the mouth to break it down into a mush that stomach acids can penetrate. In the stomach, it is treated with acids and special enzymes that break the food's components down into more useful forms. Finally, it passes through the intestines.

The liver helps the process of digestion by releasing substances that assist the stomach and intestines in breaking down food, and by breaking down toxic substances in the blood.

Cardiovascular/Circulatory System

The cardiovascular system is responsible for the transport of materials through the body. These substances include oxygen, nutrients, hormones, and waste products. The cardiovascular system includes the heart, the blood, and the blood vessels.

The cardiovascular system is a highly efficient system for moving substances around the body. The heart is the central pump of the circulatory system, sending blood throughout the body at very high speeds.

The arteries, veins and capillaries are the oxygen-delivery system

that carry oxygenated blood through the body and its tissues.

Urinary System

The urinary system (sometimes called the renal system) extracts and excretes dissolved waste products from the blood. The main organs that function in the urinary system are the kidneys and bladder.

All blood is passed through the kidneys, where structures filter out dangerous substances and excess water while retaining useful substances. The waste liquid that is filtered out by the kidneys is delivered to and stored in the bladder by the ureter. The body expels it through the urethra.

Endocrine System

The endocrine system secretes chemical signals that allow body systems to respond to environmental changes and to one another. It includes hormone-producing tissues of the pineal gland and pituitary gland in the brain; the thyroid gland; the adrenal glands; the pancreas; and the ovaries, and testes.

The endocrine system consists of a number of tissues that send out chemical messages – called ‘hormones’ – to the rest of the body. Each of these messages has its own unique purpose, to which the body’s other systems respond accordingly.

The endocrine system allows the body to respond to environmental changes, and to other types of survival changes, such as the need to reproduce.

Nervous System

The nervous system allows us to perceive and respond to the world around us. This also includes our emotions and personality. The nervous system includes the brain, the brain stem, and all the nerves.

The nervous system allows us to sense and respond to stimuli, such as light, sound, smell, and touch from our environment. It also allows rapid communication of stimuli within our body.

The brain, which is a huge central processing unit, allows us to perform tasks such as decision-making, recording memories, producing emotional responses, learning, and behaviour.

The nervous system accomplishes all of this using highly specialized cells called neurons, which can transmit signals

extremely rapidly by firing electrochemical potentials.

Musculoskeletal system

The system of muscles throughout an organism operate to move the organism and stimulate the internal organs. There are three main types of muscles in a mammal: smooth muscle, skeletal muscle, and cardiac muscle. The skeletal system provides support and attachment for the muscles and is also a very important protective measure.

Integumentary System/Exocrine System

These systems cover the body and regulate its exchange with the outside world. This includes the skin, hair, nails, sweat, and other glands that secrete substances onto the skin. Skin is our body's first line of defence against pathogens, harmful substances, injuries, and more. It also controls how much heat and water our body loses to the environment, allowing us to sweat. Even goosebumps are part of our skin's regulation system.

Fun fact: skin is also the largest organ in the body. Or perhaps we should say, the largest organ on the body.

Lymphatic System/Immune System

The lymphatic system includes the circulatory and immune systems. The lymphatic system is responsible for absorbing fat from the digestive system, maintaining fluid balance, and supporting the cells of the immune system.

The lymphatic system is a circulatory system separate from the cardiovascular system. It carries water, white blood cells, and other substances, but it does not have red blood cells or platelets.

Reproductive System

The reproductive system facilitates the production of offspring. It includes, for example, the ovaries, uterus, mammary glands (breasts), penis, and testes.

(Adapted from: <https://biologydictionary.net/body-systems/>)

Task 3. Choose the right answer for the following questions:

1. Which is not part of the circulatory system?

a) blood b) heart c) blood vessels d) trachea

2. Which is responsible for removing waste?

a) brain b) heart c) kidneys d) lungs

	chemically controls the various functions of cells, tissues, and organs through the secretion of hormones
H) Nervous System	8) The System of organs and glands responsible for the ingestion, digestion, and absorption of food
I) Reproductive System	9) The System that circulates blood and lymph through the body
J) Respiratory System	10) The System of organs involved in the intake and exchange of oxygen and carbon dioxide between the body and the environment
K) Skeletal System	11) The System that is composed of skeletal, smooth, and cardiac muscle tissue and functions in movement of the body or of materials through the body, maintenance of posture, and heat production
L) Urinary System	12) Part of the immune System; the System which circulates lymph

Task 5. Do the quiz:

1. Which of the following is not a basic survival need of animals?

- A. The need for oxygen to power cellular respiration.
- B. The need for food to power cellular respiration, and keep cellular machinery in good working order.
- C. The need to respond appropriately to environmental conditions.
- D. None of the above

2. Which of the following is NOT a major organ system?

- A. Circulatory System
- B. Respiratory System
- C. Auditory System
- D. Nervous System

3. Which of the following organ systems could we survive without for the longest period of time?

- A. Digestive system

- B. Reproductive System
- C. Respiratory System
- D. Cardiovascular System

4. The lungs are the main component of the respiratory system. What other system are lungs involved in?

- A. Excretory System
- B. Reproductive System
- C. Nervous System
- D. All of these

5. Which of the following describes the function of the lymphatic system?

- A. Filtering and moving extracellular fluids
- B. Creating red blood cells
- C. Building bone
- D. None of the above

* *For more practice do the quiz at*
<https://quizizz.com/admin/quiz/582f0181b805cc5c6608cc7e/human-body-systems-quiz>

Task 6. Think of the ways physiotherapy can improve your health and functioning of different body systems. Prepare a written report.

UNIT 2. ESSENTIALS OF REHABILITATION

Task 1. Brainstorm the meanings and functions of rehabilitation as a kind of treatment necessary for living a healthy and normal life.

Task 2. Read and translate the text. Identify the key issues discussed and get ready to speak about them.

Rehabilitation, originates from Latin “rehabilitare” means restoration, and has a broad sense of understanding and is used in all spheres of human activity – political, legal, mental, in sports, and others. In general, it can be defined as a functional and social and labour rehabilitation of patients and disabled, which is conducted by comprehensive medical, psychological, educational, professional, legal, governmental, social and other activities in which you can

return an injured person to normal life and work, according to their state.

The priority of the medical aspect of rehabilitation is indisputable in view of the fact that, taking into account the health of a certain person, the social authorities and public organizations continue to carry out their rehabilitation activities. The latter include: designing and manufacturing of technical devices, prostheses, vehicles; construction of sanatoria and other establishments, production workshops; legal and social support of life, work and life of rehabilitated people. This is done by specialists from universities, technical and other educational establishments. The medical aspects of rehabilitation which are included in the program of training students of higher educational establishments in physical culture and sports, and medicine embrace application of physical exercises, natural factors, massages for treatment purposes, restoration of health and physical efficiency of patients, the prevention or reduction of manifestations of disability and the prevention of diseases by means of physical culture.

Physical rehabilitation is provided to patients with injuries and deformations of the supporting motor apparatus, cardiovascular, neurological and mental illnesses; acquired and congenital defects; after surgical interventions; infectious and chronic diseases and, in general, those who require gradual adaptation to the physical and mental loads of professional and everyday nature, development of self-service skills, and the development of permanent compensation in the event of irreversible changes.

A complex of rehabilitation measures in one form or another begins after the patient arrives in the hospital. They are conducted according to the individual program during treatment in hospitals and continue after discharge in a rehabilitation centre, specialised sanatorium, clinic, or under the dispensary supervision. The most effective physical rehabilitation is carried out in specialised rehabilitation centres (orthopaedic, neurological, vascular and others), which are staffed with doctors of the corresponding specialties, instructors from the medical physical training and occupational therapy, physiotherapists, psychologists, speech therapists, educators, sociologists, prosthetics and lawyers. In such

centres, patients are transferred from the hospital to complete the treatment and achieve rehabilitation within the existing disease.

A physician appoints the type of physical rehabilitation to a patient. The physician, depending on the therapeutic or surgical treatment, the general condition of the patient, the course of the disease or injury and its consequences, stage, age, occupation, functional capacity and physical ability of the organism, determines indications and contraindications to the use of the types of the rehabilitation, assigns a motor mode, time, volume, type, period and stage of the rehabilitation, the sequence of procedures, involves the relevant specialists, coordinates their mutual activities.

Among them, in restorative treatment, a specialist in physical rehabilitation who graduated from a higher educational institution in physical culture occupies one of the leading places. Performing the prescription of a doctor, they select means and forms of medical physical training, develop a technique for the use of physical exercises in the early stages of treatment, outline and perform the program of further functional recovery and physical capacity of the patient, identify and extend the reserve capacity of the body, train and prepare for physical activity at work and in life, return to active participation in society. In cases of disability, a specialist in physical rehabilitation helps the disabled person to develop new movements and compensatory skills, teaches to use prostheses and other technical devices and helps to master the new profession and, in general, adapts a person to life in the changed circumstances.

Task 2. Answer the questions to the text:

1. What spheres can rehabilitation be connected with?
2. What kind of activities are embraced by the concept of rehabilitation?
3. What does the medical aspect of rehabilitation include?
4. Who is physical rehabilitation provided to?
5. Where can physical rehabilitation measures be conducted?
6. What does the program of physical rehabilitation depends on? Who prescribes it?
7. What does the job of a physical therapist include?

Task 3. A. Think of the derivatives of the following words:

- Able – _____
- Restore – _____
- Reverse – _____
- Injure – _____
- Treat – _____
- Indicate – _____
- Adapt – _____
- Infect – _____
- Prevent – _____
- Reduce – _____

B. Think of the derived words that can collocate with the words given:

_____ process, _____ changes, educational _____, _____ disease, _____ measures, rate of _____, medical _____, _____ of disease, _____ of health, _____ people.

Task 4. Complete the described basic principles of rehabilitation measures with one of the options A to F:

- A. Continuity of rehabilitation measures
- B. Individuality of rehabilitation measures
- C. Early rehabilitation measures
- D. Returning a sick or disabled person to active work
- E. The necessity to conduct the program of physical rehabilitation in the team
- F. Complexity of the rehabilitation measures

The rehab will be effective in keeping with its basic principles:

- _____. This principle will contribute to faster restoration of the body's functions, prevention of complications and in the event of development of disability – effective use of rehabilitation measures in the early stages of treatment.
- _____. This principle lies in the basis of the effectiveness of the rehabilitation, because only persistence and sequence of the rehabilitation measures by phases are the keys to reducing the time of the treatment, reducing disability and the cost of the rehabilitation,

long-term sustentation of the disabled.

- _____. Under the supervision of a doctor, rehabilitation is carried out with the involvement of other specialists – sociologists, psychologists, teachers, lawyers, etc.
- _____. Rehabilitation programs are planned for each patient or disabled and depend on the general condition, the characteristics of the course of the disease, the initial level of physical and functional status, the personality of the patient, age, sex, etc.
- _____. Physical rehabilitation, along with other patients or invalids, forms the patient's sense of a member of the team, supports a person morally, alleviates the discomfort associated with the consequences of the disease. Positive influence and good example of other members gives the re-convalescent the necessary strength and confidence in faster recovery.
- _____. This is the achievement of the main goal of the rehab, which makes a person materially independent, morally satisfied, mentally stable, active participant in public life.

Task 5. Get ready to speak about the comprehensive approach to physical rehabilitation and the importance of its key principles.

UNIT 3. TYPES, PERIODS AND STAGES OF REHABILITATION

Task 1. Read and translate the text. Write a summary (abstract) of the text highlighting its key points.

**To write an effective summary, see the notes below.*

Rehabilitation is divided into three interconnected types that have their branches and their specific tasks:

- Medical;
- Social or household;
- Professional or industrial rehabilitation.

Medical rehabilitation is the foundation of the rehabilitation process. It is aimed at restoring health, eliminating the pathological process, preventing complications, restoring or partial compensation of disturbed functions, fighting with disability, preparing the

recovering and disabled people for everyday life at home and in the society. The rehabilitation, in general, is completed in medical institutions.

An integral part of medical rehabilitation is physical rehabilitation. It mobilizes the resources of the organism, activates its protective and adaptive mechanisms, prevents complications, accelerates the restoration of functions of various organs and systems, cuts down the terms of clinical and functional recovery, adapts a person to physical activity, trains and strengthens the body, restores the opportunity to work. Depending on the nature, course and the consequences of a disease or injury, the period of the first stage of rehabilitation, physical rehabilitation is used for preventive or curative purposes and occupies the main or additional place in the complex of complementary therapeutic measures of medical rehabilitation.

Simultaneously with physical rehabilitation, the psychological preparation of the patient for overcoming the difficulties associated with the disease and its possible consequences to the necessary adaptation, re-adaptation or re-training is carried out. This training is preceded by occupational therapy, which begins during medical rehabilitation.

Two periods can be distinguished – hospital and post-hospital care in medical rehabilitation, according to the recommendations of WHO experts, in each of them there are definite stages, in the first hospital stage – hospital (stationary) and the second post-hospital period. In the II stage rehabilitation itself, period of time in a sanatorium and dispensary care.

I stage of rehabilitation. Hospital stage of rehabilitation: after diagnosis, the physician makes a patient's rehab program. It includes therapeutic or surgical methods of treatment. It is aimed at eliminating or reducing the activity of the pathological process, preventing complications, developing temporary or permanent compensations, restoration of the functions of organs and systems affected by the disease, gradual physical activation of the patient. At this stage, the therapeutic physical means of treatment are used: restorative body massage, therapeutic massage, physiotherapy, elements of occupational therapy.

II stage of rehabilitation (outpatient supervision, sanatorium) is carried out when the patient leaves the hospital, that is, at the clinic, rehabilitation centre or the sanatorium, when patient's condition is improved and stabilized and their motor activity increases. At this stage, physical rehabilitation prevails. All types of procedures are used. The main focus of the rehabilitation program is made on the gradual increase of physical activity, general training, increased functional capacity, strengthening of the organism with activation of its reserves, preparation to work, mastering of self-service devices and means of travel.

III stage of rehabilitation is called dispensary supervision. Its main purpose is to supervise the rehabilitated person, support and improve their physical condition and cope with a disability during the life process. The program includes preventive measures, periodic visits to the sanatoria, independent exercises in the cabinets of medical physical education, independently and in groups, medical examinations with carrying out tests on physical activity to determine the functional capabilities of the organism. Specialists in rehabilitation, regardless of the stage of rehabilitation, continue to work with a patient, periodically reviewing programs, taking into account the achieved effect.

Social or household rehabilitation. These are public and social activities aimed at the return of a person to active life and work, legal and material protection of its existence. The main purpose of social rehabilitation of patients with severe injuries, amputees, with mental illness, damage to the nervous system and some other diseases is the development of self-service skills.

In this process, the coordinated work of the rehabilitation specialist, occupational therapist and psychologist is very important. Patient has to use standard or specially developed devices that facilitate self-service. Along with that, consultations with lawyers, employers, sociologists, way of transportation, communication and other spheres of quality life allows a disabled person to preserve identity and don't feel outside the society.

Professional rehabilitation. The main goal is to prepare the patient for work. Its implementation depends on the nature and course of the disease, the functional state and physical capacity of the

patient, their profession, qualifications, length of service, position, working conditions and the desire to return to work.

In case of significant disability, the commission directs patients to the Medical and Social Expert Commission (MSEC) to establish disability and resolve the opportunity to work.

➤ **Summary: notes**

A summary has several important features:

- *it's short*
- *talks about the main idea*
- *provides important information (e.g. examples) that make the main idea easy to understand*
- *excludes unnecessary information*
- *uses your own words, though some key words from the original story are okay*

Key expressions

a) The article	<i>deals with</i> <i>discusses</i> <i>is devoted to</i>	the problem of ...
----------------	---	--------------------

The text tells us about ...

b) Disclosing the problem the author dwells on (upon) such matters as...

The major	<i>points</i> <i>problems</i> <i>issues</i>	of the text are the following: ...
-----------	---	---------------------------------------

c) The author	<i>pays special attention to ...</i> <i>draws readers' attention to ...</i>	
---------------	--	--

<i>Much</i> <i>Special</i>	attention is paid to...	
-------------------------------	-------------------------	--

The author	<i>concentrates on, focuses on, dwells on</i> <i>stresses, underlines, emphasises</i> <i>points out, gives the classification of</i>	
------------	--	--

Task 2. Answer the questions to the text:

1. What is medical rehabilitation aimed at?

2. What is the role of physical rehabilitation in overall treatment and patient's recovery?
3. What are the two periods and stages of medical rehabilitation?
4. What does each stage include? What are the aims of each one?
5. What kind of treatment is used at the I rehab stage?
6. What is the main focus of the II stage?
7. What does the program of the III stage include?
8. What is the purpose of social rehabilitation?
9. What does the patient's returning to work depend on?
10. What authority can make final decision about one's possibility to return to work?

Task 3. Guess the terms that mean the following. The first letter has been given to you:

1. (Of a person) unable to control part of their behaviour; unreasonable. **P** _____
2. An illness, injury, or condition that makes it difficult for someone to do some things that other people do, and that is usually permanent or lasts for a long time. **D** _____
3. An illness caused by infection or a failure of health rather than by accident. **D** _____
4. Someone whose job is to treat a particular type of mental or physical illness or disability. **T** _____
5. An extra medical problem that makes it more difficult to treat an existing illness. **C** _____
6. The activity of rubbing or pressing parts of someone's body in order to make them relax or to stop their muscles hurting. **M** _____
7. A special type of hospital, usually in the countryside, where people can have treatment and rest, especially when getting better after a long illness. **S** _____
8. A person who is receiving medical care, or who is cared for by a particular doctor when necessary. **P** _____



Task 4. Case study. Prepare a report about the stages of rehabilitation in one of the cases:

- severe stroke

- multiple sclerosis
- meningitis
- muscular dystrophies
- rheumatoid arthritis
- cerebral palsy
- tumour
- multiple trauma
- anoxia

PART II PHYSICAL THERAPY

UNIT 4. PHYSICAL THERAPY AND ITS BRANCHES

Task 1. Read and translate the text. Get ready to speak about different branches of physiotherapy and substantiate their application in different cases.

Physical therapy or physiotherapy is a medical specialty concerned with preventing and treating musculoskeletal disorders. It uses physical approaches to promote, maintain and restore physical, psychological and social well-being. This profession is dedicated to: 1) restoring strength and functions after a disease or injury, 2) improving and maintaining functional independence and physical performance, 3) correcting deformities, 4) preventing and managing pain, physical impairments, disabilities, 5) promoting fitness and health. Physiotherapy is an established, respected and evidence-based profession, which uses scientifically proven techniques to help many conditions affecting your body, such as: arthritis, back and neck pain, sports injuries, neurological conditions such as stroke, or age related conditions. It uses a variety of treatment methods as i.e. strengthening and therapeutic exercise programmes, heat treatment, massage, infrared lamps, electric stimulation. The main branches of physiotherapy are:

- *Balneotherapy* deals with treatment of diseases by bathing in hot water or water containing certain chemicals. It is used to relieve discomfort and joint stiffness, improve blood flow, etc.

- *Hydrotherapy* promotes the treatment with water; patients are put in hot baths or encouraged to swim. Various techniques are used for relaxation, to stimulate digestion, circulation, the immune system, and to relieve pain.

- *Kinesitherapy* involves active or passive movement of parts of the body in order to strengthen and stabilise joints. Kinesitherapy is used in back and limb disorders, prevention of locomotor system disorders.

- *Manual therapy* is related to the methods of hand techniques, such as mobilisation or manipulation of joints and soft tissue. These methods are used to relieve pain, swelling, increase muscle and joint functional mobility.

- *Massage* deals with treatment of muscular conditions by means of rubbing, stroking or pressing a patient's body with hands. Usually it is used to relax tight and tense muscles, improve circulation, and reduce stress

Task 2. Answer the questions to the text:

1. What is physiotherapy dedicated to?
2. What conditions are most often treated with physiotherapeutical methods?
3. Which branch of physiotherapy uses natural remedies for treatment?
4. Which branch of physiotherapy deals with hand techniques?
5. Which of the branches is used to correct the body movement through various techniques?

Task 3. Fill in the gaps using the vocabulary from the text:

1. Cardiology is a medical _____ dealing with study of the heart and its diseases.
2. This course of exercises is supposed to _____ your physical abilities.
3. I've got splitting headache, I must take some analgesics to _____ pain.
4. Physiotherapy, surgery, and pharmacotherapy are different kinds of _____.
5. Doctors and lawyers are among the most respected _____.

6. The structure at a junction of bones enabling movement is called a _____ .

7. Certain prophylactic methods are to _____ diseases.

Task 4. Think of the advancements in the area of physiotherapy and get ready to speak about the innovations. Follow the link below to learn more about technological advancements increasing the level of treatment and assistance provided to the patients: <https://rehamedtherapy.com.my/blog/technological-advancements-in-physiotherapy-treatment/>

Task 5. Read the text about the main practices of physical therapy. Get ready to speak on different activities of a Physical Therapist.

Physical therapy, which is the care and services provided by or under the direction and supervision of a physical therapist, includes:

1) **Examining** patients with impairments, functional limitations, and disability or other health-related conditions in order to determine a diagnosis, prognosis, and intervention. Examinations include, but are not limited to the following: aerobic capacity or endurance; anthropometric characteristics; arousal, mentation, and cognition; assistive, adaptive, supportive, and protective devices; community or work reintegration; cranial nerve integrity; environmental, home, or work barriers; ergonomics or body mechanics; gait and balance; integumentary integrity; joint integrity and mobility; motor function; muscle; performance; neuromotor development and sensory integration; orthotic requirements; pain; posture; prosthetic requirements; range of motion; reflex integrity; self-care and home management; sensory integrity; ventilation, respiration, and circulation.

2) **Alleviating** impairments and functional limitations by designing, implementing, and modifying therapeutic interventions that include, but are not limited to, the following: therapeutic exercise (including aerobic conditioning) functional training in self-care and home management (including activities of daily living and instrumental activities of daily living) functional training in community or work reintegration activities (including instrumental

activities of daily living, work hardening, and work conditioning) not limited to, the following: therapeutic exercise (including aerobic conditioning); functional training in self-care and home management (including activities of daily living and instrumental activities of daily living); functional training in community or work reintegration activities (including instrumental activities of daily living, work hardening, and work conditioning); manual therapy techniques (including mobilization and manipulation); prescription, fabrication, and application of assistive, adaptive, supportive, and protective devices and equipment; debridement and wound care; physical agents and mechanical modalities electrotherapeutic modalities; patient-related instruction.

3) **Preventing** injury, impairments, functional limitations, and disability, including the promotion and maintenance of fitness, health, and quality of life in all age populations.

4) **Engaging** in consultation, education, and research.

Task 6. Fill in the gaps in the text with the words given in the box:

<i>initial</i>	<i>examinations</i>	<i>condition</i>	<i>practitioner</i>
<i>intervention</i>	<i>re-examination</i>	<i>conclude</i>	<i>appropriate</i>

The examination is a required element prior to any (1) _____ and is performed for all patients. The physical therapist selects components of specific (2) _____ based on the purpose of the patient's visit to the physical therapist, the complexity of the patient's (3) _____, and the evolving impression formed by the physical therapist during the examination. For example, the physical therapist may (4) _____ from the patient's history and systems review that further testing and management by the physical therapist is not required and/or that the patient should be referred to another health care (5) _____. Conversely, the physical therapist may decide that a full examination is necessary and then select (6) _____ tests and measures to be administered. The range of tests and measures may include those selected from any or all of the specific examinations, depending on the complexity of the patient's problems and the directions taken by the physical therapist in the clinical decision-

making process. It should be noted that at some point after completing the (7)_____ examination, the physical therapist may conclude that a second examination ((8)_____) is indicated (because of new clinical indications, failure of the patient to respond to interventions, etc.) and proceed to perform it.

Task 7. Discuss the key issues considered in the Unit with your partner (use the notes below):

➤ **Functional Vocabulary for holding discussion**

What you think about somebody/something

- *As far as I'm concerned ...*
- *In my opinion ...*
- *As far as I know ...*
- *In my view ...*
- *I think / I don't think ...*
- *If you want my honest opinion ...*

How to agree/disagree

- *I totally/fully/partly agree / I don't agree with you.*
- *I believe/don't believe ...*
- *I'm convinced that ...*
- *The way I see it ...*
- *It seems to me that ...*
- *As a matter of fact, ...*
- *That's right/wrong.*
- *Exactly.*
- *It's a fact that ...*

Asking for clarification

- *What do you think?*
- *What's your opinion?*
- *Would you like to say something?*
- *What do you mean?*
- *What are your ideas?*

How to interrupt politely

- *I'm sorry, but ...*
- *Can/May I add something?*
- *Sorry to interrupt, but ...*

Other opinions

- *On the one hand ... on the other hand ...*
- *They claim that ...*
- *They also say ...*

UNIT 5. THERAPEUTIC PHYSICAL CULTURE

Task 1. Read the text, make notes and get ready to substantiate the role of physical training as a part of comprehensive treatment method.

Therapeutic physical culture or training is a method of treatment that uses the means and principles of physical trainings for the treatment of diseases and injuries, prevention of their exacerbations and complications, the restoration of health and working capacity of patients and invalids.

The main means of therapeutic physical trainings (TPT) are physical exercises, which are the basis of muscular activity, whose biological role is extremely important in human life. There is a direct dependence and a close relationship between muscle work, the activity of internal organs, and the normal functioning of the central nervous system (CNS). Decrease in motor activity (hypo-dynamia) leads to violations of the functional state of an organism and the appearance of painful changes in the cardiovascular, respiratory, digestive and other systems.

Normal lifestyle and functional state of the organism are disturbed during a disease, its adaptation to changes in the environment decreases, muscular contractions and the desire to perform physical work weaken. In order to create conditions for recovery, to prevent complications and exacerbations of the illness, the patient is primarily prescribed the rest regime. However, long-term non-active condition causes changes in the activity of the systems of the organism as a whole, increases the disturbances caused by the disease. This can lead to a number of complications that significantly impair the course of the disease and may endanger the life of the patient. Therefore, in modern medicine, in case the patient's condition allows, it is common practice to combine the rest regime with physical exercises.

TPT reduces the negative effects of the enforced rest, increases the tone and activates the body, mobilises its protective and

compensatory reactions, prevents complications, restores and expands the functional capabilities of the body, and approximates the functional recovery, reduces the timing of treatment. Depending on the nature of the clinical course of illness or injury, it is possible to purposefully influence and mainly change certain functions of the body by restoring damaged systems, adapting the patient to the physical loads of domestic and industrial nature. Gradually increasing dosed physical loads provide the general training of the organism, which is the basis for the recovery of the patient's health. Therefore, TPT exercise is a compulsory medical device and an integral part of the rehabilitation process.

The exercise therapy is part of a comprehensive treatment method that is used in modern medicine. Its essence is to combine the positive effects on the body of different means and treatments that complement each other. This ensures rapid recovery and rehabilitation of patients within the limits of the existing disease or the consequences of trauma. They distinguish therapeutic, surgical and orthopaedic methods of treatment, diet therapy, psychotherapy.

The main feature that distinguishes exercise therapy from all other methods of treatment is conscious and active participation of the patient in the process of his treatment by physical exercises. Exercises therapy is shown to be effective practically for almost all diseases and patients of any age. Contraindications: general difficult condition of the patient, acute period of the disease and its progressive course, severe pain, threat of thromboembolism, bleeding or the possibility of its appearance in connection with movements, high temperature and increase erythrocyte sedimentation rate (ESR) over 20-25 mm/h, intoxication, malignant tumours.

Task 2. Answer the questions to the text:

1. What does the decrease in motor activity lead to? What disturbances to the lifestyle and normal state of the organism does it cause?
2. How are rest regime and physical exercises combined in case of serious injuries?
3. What are the benefits of therapeutic physical training?
4. What is the main feature of exercise therapy?

5. Are there any contraindications to TPT? If yes, what are they?

Task 3. Read the text about different types of physical exercises and get ready to describe them:

Means of therapeutic physical culture

Physical exercises and natural factors are included in physical therapy. The main among them are physical exercises, which in the therapeutic physical culture are used as follows:

- gymnastic exercises;
- idea-motor exercises;
- sports and applied exercises;
- games as exercises.

Gymnastic exercises in therapeutic physical culture are classified:

- anatomically (for muscles of the head, neck, trunk, arms and legs);
- according to the activity of execution (active, active with the help and with effort, passive, active-passive);
- according to the nature of exercises (respiratory, corrective, coordination of movements, ordinal, preparatory, etc.);
- according to the use of items and appliances (without, with them, on them).

Idea-motor exercises are performed only in the imagination and those sending impulses to the contracted muscles. Idea-motor exercises with the correct application of them can significantly increase the "muscle sensitivity", working capacity and ability to perform complex exercises and actions. They are used mainly in the hospital rehabilitation period for persons with paralysis and paresis, during immobilization, when the patient is not able to perform movements actively. During this period, such exercises support the stereotype of movements, reflexively enhance the activity of the cardiovascular, respiratory and other systems of the body, reduce the effects of prolonged hypo-dynamics.

Sports and Applied Exercises include: walking, running, jumping, climbing, crawling, throwing elements and holistic actions at home and at work; skiing, swimming, watercraft, cycling, skating,

walks, excursions, tourism. These sports-applied exercises are assigned mainly in the post-hospital period in the II and III stages of rehabilitation, during the restoration of complex motor skills, physical qualities and psycho-emotional state of patients; working out and fixing of permanent compensations, general fitness of an organism. They can be a kind of stage for further regular sports, including sport activities for the disabled.

Gaming exercises are divided into on-the-go games, slow games, mobile and sports games. They are aimed at improving coordination of movements, speed of motor reaction, development of attention, distraction of the patient from thoughts about illness, increase of emotional tone. On-site games and slow games are used in the introductory or final part-sessions of the medical gymnastics, in the free motor regimen, during the hospital rehabilitation period. Moving and sports games can be part of a group exercise with a therapeutic gymnastics or an independent form in post-hospital stages of rehabilitation

➤ **Exercise Vocabulary**

Watch the video under the link <https://www.youtube.com/watch?v=jpgJg-icdk> and put down the key words to describe gymnastic exercises and the purposes they are done for.

Watch another video to get better mastery of the relevant vocab: <https://www.youtube.com/watch?v=nBR9Rh2-Xww>.

Task 4. Match the words 1-7 with their description A-G:

1. Aerobic exercise	A. The ability to use body parts and senses together.
2. Anaerobic exercise	B. Working your body harder than normal.
3. Coordination	C. Makes your body use large amounts of oxygen over a long period of time.
4. Warm up	D. The ability to use your muscles for a long time without getting tired.

5. Overload	E. Use short period of hard work followed by periods of rest
6. Muscular endurance	F. Ability to move and bend your body easily.
7. Flexibility	G. 3-5 minutes of easy physical activity before you workout

Task 5. Look at the picture and describe the workout:



Task 6. Case study. Devise a program of an effective physical training for a particular case.

UNIT 6. THERAPEUTIC MASSAGE

Task 1. Read the text and get ready to describe the mechanisms of the complex massage. Discuss the effectiveness of each mechanism.

Massage, used for the treatment of various diseases and injuries,

is called therapeutic. It is an effective remedy for functional therapy and is therefore used at all stages of medical rehabilitation of patients. Massage is recommended for adults and children in the complex restorative treatment of diseases of the cardiovascular, respiratory and nervous systems, musculoskeletal system, internal organs, and skin. It is used after injuries, in surgery, gynaecology, and also for preventive purposes. The therapeutic effect of massage is achieved by mechanical actions on the patient's body using the same methods, which are used in other types of massage: hygienic, cosmetic and sports. Methodology and technique of the basic methods of massage are: stroking, rubbing, kneading, vibration, each of which holds a number of auxiliary actions.

The metered mechanical stimulation of the human body, which is applied by the hands of a masseur or with the help of special apparatus, causes local and general neuro-humoral changes in the body due to reflex reactions and the emission of biologically active substances. Three main mechanisms in the complex massage on the human body are distinguished: neuro-reflexive, humoral and mechanical.

Neuro-reflexive mechanism of massage action consists of mechanical irritation of various receptors, localised in the skin (external receptors), tendons, ligaments, fascia, muscles (proprioceptors), vessels (angio-receptors), internal organs (internal receptors). The flow of impulses from the excited receptors passes to different parts of the central nervous system (CNS), and cause the functional reactions of systems and internal organs of the body by the type of motor-visceral reflexes. Massage intensity can be reduced or increased, depending on the purpose and method of massage, the course of the disease, the initial level of functional state of the nervous system which contributes to the formation of adaptive reactions.

The humoral mechanism of action of massage is due to the emission of biologically active substances, which are formed in the skin under direct mechanical and thermal action of massage – histamine, acetylcholine, products of the decomposition of protein (amino acids and polypeptides) into the blood. It is very important that they do not accumulate only in the area of massage, but with the

flow of the blood and lymph spread throughout the body. Biologically active substances expand blood vessels and increase their permeability, improve blood supply and metabolic processes, transfer nervous impulses to the muscles, stimulating their activity.

Mechanical action of massage consists in displacement and stretching of tissues, removal of extraneous superficial skin cells, increase of temperature of the body part; appearance of biologically active products, the disclosure and expansion of the lumen of the capillaries; extrusion, pushing and further promoting of tissue fluid, blood and lymph; intensification of blood and lymph circulation. All this contributes to the elimination of the edema, increasing the mobility of tissues and joints, and restoring their functions.

Task 2. Answer the questions to the text:

1. At what stages of rehabilitation can massage be applied and how?
2. What are the recommendations for the use of massage?
3. What are the basic massage methods?
4. Describe the neuro-reflexive mechanism of massage?
5. What does mechanical action of massage consist in?

Task 3. Watch the video under the link <https://www.youtube.com/watch?v=v0fY2tIDlgU> and tell about the sequence of techniques the masseur uses.

Task 4. Describe the influence of massage on different systems of the organism and contraindications using the key words and phrases:

Influence of massage on the skin: *clean the skin, cells of the epidermis, improve the function of, enhance blood supply, stimulate, activate, muscle tone, elastic, dense.*

Influence of massage on the muscular system: *increase in strength, contractile ability, restorative processes, normalisation of tone, resorption, regeneration, elasticity, blood circulation, removal of metabolic products, reflex reactions.*

Influence of massage on the joints: *improve, elasticity, strength, ligaments and tendons, mobility, joints, surrounding tissues,*

stimulate, prevent, swelling, accelerate, resorption of haemorrhages and effusions, eliminate, restore.

Influence of massage on the circulatory and lymphatic system: *expansion, increase, capillaries, accelerate, venous blood circulation, lymph flow, elimination of edema, stagnant phenomena, blood supply to the heart, activate, contractile function, delivery of oxygen.*

Influence of massage on the respiratory system: *respiratory muscles, reflex effects, improve, pulmonary ventilation, gas exchange, intensify, blood circulation, elimination, congestive products, lungs, delivery.*

Influence of massage on metabolism: *intensify, delivery, nutrients, oxygen, tissues, elimination, products of decomposition, carbon dioxide, activate, oxidative-reducing and metabolic processes, extraction of mineral salts.*

Contraindications: *additional precautions, skin disease, allergic rash, inflammation of the lymphatic vessels, purulent processes, sexually transmitted diseases, abdomen, pregnancy.*

Task 5. Comment on the information given in the table:

№	Name of the massage procedure	Conventional massage units
1.	Head massage (frontal-temporal and occipital parietal area)	1,0
2.	Massage of the face (frontal, occlusive upper and lower limb)	1,0
3.	Neck massage	1,0
4.	Massage of the collar area (the back surface of the neck, back to the level IV of the thoracic vertebra, the anterior surface of the chest to n rib)	1,5
5.	Massage of the upper limb	1,5
6.	Massage of the upper limb, shoulder and shoulder area	2,0
7.	Massage of the shoulder joint (upper third of the shoulder, shoulder joint and shoulder arms of the same name)	1,0
8.	Massage of the elbow joint (the upper third of the	1,0

	forearm, the areas of the elbow joint and the lower third of the shoulder)	
9.	Massage of the wired joint (proximal brush, articular areas and forearm)	1,0
10.	Massage of the hand and forearm	1,0
11.	Massage of the chest area (the anterior surface of the chest from the anterior margin of the shoulder to the edge arches in the back of the vii cervical to the lumbar vertebra)	2,5
12.	Back massage (from the vii cervical to the lumbar vertebra and from the left to the right middle axial line in children, including the lumbar sacral region)	1,5
13.	Massage muscles of the anterior abdominal wall	1,0
14.	Massage of the lumbar sacral region (from the lumbar vertebra to the lower spine folds)	1,0
15.	Segmental massage of the lumbar sacral region	1,0
16.	Massage of the back and lumbar (from the vii cervical vertebra to the sacrum, from the left to the right middle axillary line)	1,5
17.	Massage of the cervical and thoracic spine (areas of the back of the neck and back areas to the lumbar vertebra from the left to the right axial line)	2,0
18.	Segmental massage of the cervical and thoracic spine	2,0
19.	Massage of the spine area (areas of the posterior surface of the neck, back and lumbar sacral area from left to right axial line)	3,0
20.	Massage of the lower limb and lower back (legs, legs, hips, buttocks and lumbar sacral area)	2,5
21.	Massage of the lower extremity	2,0
22.	Massage of the hip joint (upper third of the thigh, hip joint and buttocks of the same name)	1,5
23.	Massage of the knee joint (upper third of the leg, knee joints and lower third of the thigh)	1,0

24.	Massage of the ankle joint (proximal foot, ankle joint and lower third of the shin)	1,0
25.	Foot and leg massage	1,0

Task 6. Prepare a Glossary containing key terminological words and phrases.

APPENDIX

TEST TASK 1.

Read the four texts, A-D. For each question below look through texts A-D again to find the relevant information.

Fractures, dislocations and sprains: Texts

TEXT A

Fractures (buckle or break in the bone) often occur following direct or indirect injury, e.g. twisting, violence to bones. Clinically, fractures are either:

- closed, where the skin is intact, or
- compound, where there is a break in the overlying skin

Dislocation is where a bone is completely displaced from the joint. It often results from injuries away from the affected joint, e.g. elbow dislocation after falling on an outstretched hand.

Sprain is a partial disruption of a ligament or capsule of a joint.

TEXT B

Simple Fracture of Limbs

Immediate management:

- Halt any external haemorrhage by pressure bandage or direct pressure
- Immobilise the affected area
- Provide pain relief

Clinical assessment:

- Obtain complete patient history, including circumstances and method of injury – medication history – enquire about anticoagulant use, e.g. warfarin
- Perform standard clinical observations. Examine and record: – colour, warmth, movement, and sensation in hands and feet of injured limb(s)
- Perform physical examination

Examine:

- all places where it is painful
- any wounds or swelling
- colour of the whole limb (especially paleness or blue colour)
- the skin over the fracture

- range of movement
- joint function above and below the injury site

Check whether:

- the limb is out of shape – compare one side with the other
- the limb is warm
- the limb (if swollen) is throbbing or getting bigger
- peripheral pulses are palpable

Management:

- Splint the site of the fracture/dislocation using a plaster backslab to reduce pain
- Elevate the limb – a sling for arm injuries, a pillow for leg injuries
 - If in doubt over an injury, treat as a fracture
 - Administer analgesia to patients in severe pain. If not allergic, give morphine (preferable); if allergic to morphine, use fentanyl
 - Consider compartment syndrome where pain is severe and unrelieved by splinting and elevation or two doses of analgesia
 - X-ray if available

TEXT C

Drug Therapy Protocol:

Authorised Indigenous Health Worker (IHW) must consult Medical Officer (MO) or Nurse Practitioner (NP). Scheduled Medicines Rural & Isolated Practice Registered Nurse may proceed.

Drug	Form	Strength	Route of administration	Recommended dosage	Duration
Morphine	Ampoule	10 mg/mL	IM/SC	Adult only: 0.1-0.2 mg/kg to a max. of 10 mg	Stat Further doses on MO/NP order
			IV (IHW may not administer IV)	Adult only: Initial dose of 2 mg then 0.5-1 mg increments slowly, repeated every 3-5 minutes if required to a max. of 10 mg	

Use the lower end of dose range in patients ≥ 70 years.

Provide Consumer Medicine Information: advise can cause nausea and vomiting, drowsiness.

Respiratory depression is rare – if it should occur, give naloxone

TEXT D

Technique for plaster backslab for arm fractures – use same principle for leg fractures

1. Measure a length of non-compression cotton stockinette from half way up the middle finger to just below the elbow. Width should be 2–3 cm more than the width of the distal forearm.

2. Wrap cotton padding over top for the full length of the stockinette – 2 layers, 50% overlap.

3. Measure a length of plaster of Paris 1 cm shorter than the padding/stockinette at each end. Fold the roll in about ten layers to the same length.

4. Immerse the layered plaster in a bowl of room temperature water, holding on to each end. Gently squeeze out the excess water.

5. Ensure any jewellery is removed from the injured limb.

6. Lightly mould the slab to the contours of the arm and hand in a neutral position.

7. Do not apply pressure over bony prominences. Extra padding can be placed over bony prominences if applicable.

8. Wrap crepe bandage firmly around plaster backslab

Questions 1-7

For each question 1-7 decide which text (A, B, C, or D) the information comes from. You may use any letter more than once.

In which text can you find information about

1. procedures for delivering pain relief? _____
2. the procedure to follow when splinting a fractured limb? _____
3. what to record when assessing a patient? _____
4. the terms used to describe different types of fractures? _____
5. the practitioners who administer analgesia? _____
6. what to look for when checking an injury? _____
7. how fractures can be caused? _____

Answer each of the questions 8-14 with a word or short phrase from one of the texts. Each answer may include words, numbers or both.

8. What should be used to elevate a patient's fractured leg?

9. What is the maximum dose of morphine per kilo of a patient's weight that can be given using the intra-muscular (IM) route?

10. Which parts of a limb may need extra padding?

11. What should be used to treat a patient who suffers respiratory depression?

12. What should be used to cover a freshly applied plaster backslab?

13. What analgesic should be given to a patient who is allergic to morphine?

14. What condition might a patient have if severe pain persists after splinting, elevation and repeated analgesia?

Questions 15 – 20

Complete each of the sentences 15-20 with a word or short phrase from one of the texts, include words, numbers or both.

15. Falling on an outstretched hand is a typical cause of a _____ of the elbow.

16. Upper limb fractures should be elevated by means of a _____.

17. Make sure the patient isn't wearing any _____ on the part of the body where the plaster backslab is going to be placed.

18. Check to see whether swollen limbs are _____ or increasing in size.

19. In a plaster backslab, there is a layer of _____ closest to the skin.

20. Patients aged _____ and over shouldn't be given the higher dosages of pain relief.

MAKING PRESENTATION KEY POINTS

Function	Language
Welcoming your audience	Good morning, ladies and gentlemen. Good afternoon, everybody.
Addressing the audience	I appreciate you taking your time to attend this presentation.
Introducing the subject	I'm going to talk about / present / give you an overview of / inform you about / Let's begin with _____ First of all, I'll _____
Formulating a purpose	The purpose of my presentation is to introduce _____
Giving an outline	To start with I'll describe _____. Then I'll mention some of the problems _____. After that I'll consider _____. Finally, I'll summarise my presentation. I'll be speaking about the following main points. My presentation will focus specifically on _____. I'll be glad to answer your questions while I'm speaking / at the end of my talk.
Starting the first point	That deals with the question of _____ Let's start with _____ We are pleased to announce / introduce our _____
Closing a point	Well, I've told you about _____ That's all I have to say about _____ I'll have to close here.
Starting another	Let's turn now to the question of _____ Now we'll move on to _____ I'd like now to discuss _____ – Next _____ Let's look now at _____ Now let me turn to _____
Referring to visual aids	I'd like you to look at this chart / graph.

Function	Language
Clarifying	Let me just go over that again.
Giving reasons / causes	Therefore, _____ So, _____ As a result, _____ Consequently _____ That's why _____
Giving an example	For example, _____ A good example of this is _____ As an illustration, _____ To give you an example, _____ To illustrate this point _____
Dealing with questions	If you have any questions, I'd be glad to answer them at the end. I'll try to answer all of your questions after the presentation. We'll be examining this point in more detail later on. I'd like to deal with this question later.
Summarizing and concluding	To conclude, _____ In conclusion, _____ Now, to sum up _____ So let me summarize (briefly) what I've said. So. We've covered three main points _____.
Ordering	Firstly / secondly / thirdly / lastly, _____ First of all / then / next / after that / finally, _____ To start with / later / to finish up, _____
Thanking your audience	Many thanks for your attention. May I thank you all for being such an attentive audience.

USEFUL LINKS

<https://biologydictionary.net/body-systems/>

<https://www.who.int/news-room/fact-sheets/detail/rehabilitation>

<https://www.verywellhealth.com/what-s-the-difference-between-physical-rehabilitation-and-physical-therapy-5192732>

<https://rehamedtherapy.com.my/blog/technological-advancements-in-physiotherapy-treatment/>

<https://www.youtube.com/watch?v=nBR9Rh2-Xww>

<https://www.youtube.com/watch?v=v0fY2tIDlgU>

<https://www.lcmh.com/medical-services/physical-rehabilitation/>

Glossaries and Dictionaries

<https://www.specialtree.com/rehabilitation-glossary>

<http://www.alternatives4children.org/glossary/physical-therapy-glossary.pdf>

<https://abbreviations.yourdictionary.com/articles/basic-physical-therapy-abbreviations-and-terminology.html>

Article Databases of open access journals

<https://physicaltherapyweb.com/physical-therapy-journals/>

REFERENCES

1. Вакуленко О. Л. Основи науково-технічного перекладу. Англійська мова для професійного спілкування : підручник. Рівне : НУВГП, 2010. С. 15–37.
2. A Guide to Physical Therapist Practice. Volume One: A description of Patient Management. Phys. Ther. 1995.
3. Basic Therapy Abbreviations and Terminology: online dictionary. Access mode:
<https://abbreviations.yourdictionary.com/articles/basic-physical-therapy-abbreviations-and-terminology.html>
4. Bottomley, J. M. Quick Reference Dictionary for Physical Therapy. Slack Incorporated. 2012. 650 p.
5. Budanova, L. G. et al. English Proficiency for Physiotherapy Students: textbook for applicants for higher education. Kharkiv : NUPh, 2021. 98 p.
6. Medlin L. English for Specific Purposes (ESP): Nursing in the U.S. Hospital. A project by Laura Medlin. Fall 2009. Access mode: <https://scholarworks.calstate.edu/downloads/qv33rx287>
7. Mahlovanyy, A. V. Bases of Physical Rehabilitation in Medicine. Lviv, 2019. 70 p.