Appendix No. 1

DESCRIPTION OF THE PROGRAMME FOR THE FIELD OF STUDY
PHYSIOTHERAPY – academic year 2026–2027
long-cycle (single-cycle) Master's studies
practical profile

1. GENERAL CHARACTERISTICS OF THE STUDY PROGRAMME	
Faculty conducting the studies:	**FACULTY OF HUMAN SCIENCES**
1.1 Name of the programme/field of study/specialization	**PHYSIOTHERAPY**
1.2 Level of studies	**LONG-CYCLE (SINGLE-CYCLE) MASTER'S STUDIES**
1.3 Level of the Polish Qualifications Framework	**7 PRK**
1.4 Profile of studies	**PRACTICAL**
1.5 Form(s) of studies	**FULL-TIME STUDIES** **PART-TIME STUDIES**
1.6 Professional title awarded to graduates, ISCED CODE. Synthetic description of the professional characteristics and the graduate's workplace after completing the studies	**Master of Physiotherapy; ISCED CODE: 0915** A graduate of long-cycle (single-cycle) Master's studies in the field of physiotherapy obtains the professional title of Master of Physiotherapy. After obtaining the title and submitting an appropriate application to the National Chamber of Physiotherapists, the graduate receives a document confirming the right to practise the profession of physiotherapist. A graduate of long-cycle (single-cycle) Master's studies with a practical profile in the field of Physiotherapy will acquire the qualifications and skills necessary to take up professional work in: – public and non-public healthcare facilities, – hospitals and health-resort sanatoriums for children and adults, – rehabilitation, care and nursing centres, – social welfare homes, – hospices, – community care for patients at home, – private and public physiotherapy practices, – rehabilitation clinics, – centres for people with disabilities, – sports and recreation centres, – Wellness & SPA, – fitness clubs, – institutions engaged in counselling and the dissemination of knowledge in the field of medical sciences and health sciences, – in educational establishments: schools, universities, research and development institutions, and in central and local government administration.

	Long-cycle (single-cycle) Master's studies allow for the acquisition of in-depth knowledge, the development of skills and the building of competences needed for the effective use of the achievements of physiotherapy in the practice of the profession. In addition, graduates are particularly well prepared for the needs of the labour market thanks to the proposed specializations consistent with current trends in the profession: • *Physiotherapy in geriatric care* • *Physiotherapy in sport* which increase their chances of obtaining employment in various fields related to the health sciences and medical sciences.
1.7 Number of semesters and ECTS credits required to complete the studies	**10 semesters – 300 ECTS**
1.8 Total number of hours of teaching classes in full-time/part-time studies	**full-time studies – 5320** **part-time studies – 5260**
1.9. Total number of ECTS credits obtained within classes conducted with the direct participation of academic teachers or other persons conducting classes	**213 ECTS – Full-time studies** **210 ECTS – part-time studies**
1.10 Number of ECTS credits within classes in the field of the humanities or social sciences	**5 ECTS**

2. LEARNING OUTCOMES SPECIFIED IN THE STUDY PROGRAMME AND THE ASSIGNMENT OF SCIENTIFIC DISCIPLINES

2.1 Assignment of disciplines

Scientific area: area

No.	Name of the discipline	Number of ECTS credits	%
1.	Health sciences – leading discipline	**264**	**88%**
2.	Medical sciences	**36**	**12%**
Total number of ECTS credits and percentage of ECTS in the study programme		**300**	**100%**

2.2 Field-specific learning outcomes in relation to the PRK

Name of the field of study:	PHYSIOTHERAPY		
Level of education:	LEVEL 7 PRK – LONG-CYCLE (SINGLE-CYCLE) MASTER'S STUDIES		
Profile of education:	Practical	Reference to:	
Symbol of learning outcomes for the study programme	Learning outcomes upon completion of long-cycle (single-cycle) Master's studies in the field of PHYSIOTHERAPY	universal characteristics for the given PRK level	second-degree characteristics of learning outcomes for qualifications at levels 6–7 of the PRK
KNOWLEDGE The graduate knows and understands:			
K_W01	issues within the scientific discipline of biological sciences, including the development, structure and functions of the human body under normal and pathological conditions	P7U_W	P7S_WG
K_W02	issues within the scientific discipline of medical sciences, including the aetiology, pathomechanism, symptoms and course of the most common diseases	P7U_W	P7S_WG

K_W03	issues within the scientific disciplines of psychology, pedagogy and sociological sciences, philosophy, bioethics;	P7U_W	P7U_WK
K_W04	the principles of the effects of mechanical forces on the body of a healthy and a sick person, including the elderly, with various dysfunctions and various diseases, under various conditions;	P7U_W	P7S_WG
K_W05	the mechanism of action of physical factors on the human body and the effects of physical treatments in the treatment of persons with various diseases and dysfunctions, including the elderly, under various conditions;	P7U_W	P7S_WG
K_W06	indications and contraindications for performing treatments in the field of physical therapy and massage, kinesiotherapy and manual therapy, as well as special methods of physiotherapy;	P7U_W	P7S_WG
K_W07	recommendations for the use of physiotherapy in specific disease states;	P7U_W	P7S_WG
K_W08	the principles of operation of medical devices and the principles of their use in the treatment of persons with various diseases and dysfunctions, including the elderly, under various conditions;	P7U_W	P7S_WG
K_W09	specialist issues in the field of the theory, methodology and practice of physiotherapy;	P7U_W	P7S_WG
K_W10	issues in the field of functional diagnostics for the purposes of physiotherapy, planning physiotherapeutic procedures and monitoring their effects – at an advanced level;	P7U_W	P7S_WG
K_W11	issues related to shaping, maintaining and restoring fitness and physical capacity in persons of various ages, including the elderly, lost or reduced as a result of various diseases or injuries, as well as the principles of health promotion – at an advanced level	P7U_W	P7S_WG
K_W12	the legal and economic aspects of the functioning of entities engaged in the rehabilitation of persons with disabilities	P7U_W	P7U_WK
K_W13	the ethical, legal and social determinants of practising the profession of physiotherapist.	P7U_W	P7U_WK
A. BIOMEDICAL FOUNDATIONS OF PHYSIOTHERAPY			
A.W01	knowledge of the anatomical structure of the individual systems of the human body and the basic relationships between their structure and function in health and disease, with particular emphasis on the musculoskeletal system;	P7U_W	P7S_WG
A.W02	knowledge of medical imaging methods, the principles of their application, and their diagnostic value (x-ray imaging, ultrasonography, computed tomography, and magnetic resonance imaging);	P7U_W	P7S_WG
A.W03	knowledge of anatomical terminology necessary for describing health status and body structures;	P7U_W	P7S_WG
A.W04	knowledge of the basic physical properties, structure, and functions of human cells and tissues;	P7U_W	P7S_WG
A.W05	knowledge of embryonic development, organogenesis, and the stages of human embryonic and sexual development;	P7U_W	P7S_WG
A.W06	knowledge of the fundamental mechanisms of processes occurring in the human body from childhood through adulthood to old age;	P7U_W	P7S_WG
A.W07	knowledge of the basic metabolic processes occurring at the cellular, organ, and systemic levels, including hormonal regulation, reproduction, and ageing processes, as well as their changes under the influence of physical activity or as a result of certain diseases;	P7U_W	P7S_WG P7S_WK
A.W08	knowledge of the basic functioning of the individual systems of the human body, including the musculoskeletal and sensory systems;	P7U_W	P7S_WG P7S_WK

A.W09	knowledge of the kinesiological mechanisms of movement control and regulation of metabolic processes in the human body, as well as exercise physiology;	P7U_W	P7S_WG P7S_WK
A.W10	knowledge of methods for assessing the function of individual organs and body systems and their application in evaluating a patient's functional status in various clinical areas;	P7U_W	P7S_WG P7S_WK
A.W11	knowledge of the mechanisms of action of pharmacological agents used in the treatment of various diseases and body systems, the principles of their administration, their limitations and side effects, and their impact on patient functioning, taking into account the need to consider these factors when planning physiotherapy;	P7U_W	P7S_WG P7S_WK
A.W12	knowledge of external physical factors and their effects on the human body;	P7U_W	P7S_WG P7S_WK
A.W13	knowledge of the biomechanical principles of body statics and motor activities in healthy and diseased individuals;	P7U_W	P7S_WG P7S_WK
A.W14	knowledge of the principles of ergonomics in daily activities and work-related tasks, with particular emphasis on the ergonomics of physiotherapy practice;	P7U_W	P7S_WG P7S_WK
A.W15	knowledge of the principles of motor control and the theories and concepts of movement regulation and control;	P7U_W	P7S_WG P7S_WK
A.W16	knowledge of the foundations of learning postural and movement control, as well as the teaching of motor skills;	P7U_W	P7S_WG P7S_WK
A.W17	knowledge of the mechanisms underlying the development of functional disorders and the pathophysiological basis of disease development;	P7U_W	P7S_WG P7S_WK
A.W18	knowledge of methods of general health assessment and the signs and symptoms of common disorders and pathological changes;	P7U_W	P7S_WG P7S_WK
A.W19	knowledge of methods for assessing basic vital functions in situations of health or life-threatening emergencies;	P7U_W	P7S_WG P7S_WK
A.W20	knowledge of the genetic determinants of disease development in the human population;	P7U_W	P7S_WG P7S_WK
A.W21	knowledge of genetic and phenotype-related determinants of motor abilities and Skills;	P7U_W	P7S_WG P7S_WK
B. GENERAL ACADEMIC SUBJECTS			
B.W01	knowledge of the psychological and sociological determinants of individual functioning in society;	P7U_W	P7S_WK
B.W02	knowledge of the psychological and social aspects of helping attitudes and supportive interventions;	P7U_W	P7S_WK
B.W03	knowledge of communication models in healthcare, as well as basic communication skills for interacting with patients and members of an interdisciplinary therapeutic team;	P7U_W	P7S_WG P7S_WK
B.W04	knowledge of the principles of motivating patients to adopt health-promoting behaviours and communicating unfavourable prognoses, the importance of verbal and non-verbal communication in patient interactions, and the concept of trust in the patient–therapist relationship;	P7U_W	P7S_WG P7S_WK
B.W05	knowledge of the basic methods of psychotherapy;	P7U_W	P7S_WG
B.W06	knowledge of the fundamental principles of pedagogy and special education;	P7U_W	P7S_WG
B.W07	knowledge of the limitations and determinants of education for persons with disabilities, principles for addressing their educational challenges, and contemporary	P7U_W	P7S_WG P7S_WK

	trends in the rehabilitation and social inclusion of persons with disabilities;		
B.W08	knowledge of the basic forms and methods of information delivery using educational resources in physiotherapy teaching, training, and continuing professional development;	P7U_W	P7S_WG P7S_WK
B.W09	knowledge of the principles governing the physiotherapy profession and the functioning of the professional self-government of physiotherapists;	P7U_W	P7S_WG P7S_WK
B.W10	knowledge of legal regulations related to the practice of physiotherapy, including patients' rights, employer and employee responsibilities, particularly those arising from civil law, labour law, industrial property protection, and copyright law, as well as the principles of civil liability in physiotherapy practice;	P7U_W	P7S_WG P7S_WK
B.W11	knowledge of the factors determining health and contributing to health risks;	P7U_W	P7S_WG P7S_WK
B.W12	knowledge of the principles of health education and health promotion, as well as elements of social policy related to healthcare;	P7U_W	P7S_WG P7S_WK
B.W13	knowledge of the determinants of health and health risks, and of the scale of disability-related issues from demographic and epidemiological perspectives;	P7U_W	P7S_WG P7S_WK
B.W14	knowledge of the principles of demographic analysis and the basic concepts of epidemiological statistics;	P7U_W	P7S_WG
B.W15	knowledge of the principles of organisation and financing of the healthcare system in the Republic of Poland, as well as the economic determinants of providing physiotherapy services;	P7U_W	P7S_WG P7S_WK
B.W16	knowledge of the principles of managing a therapeutic team and of organising and administering rehabilitation service providers;	P7U_W	P7S_WK
B.W17	knowledge of the principles governing the employment of persons with different levels of disability;	P7U_W	P7S_WK
B.W18	knowledge of the ethical principles of contemporary healthcare marketing;	P7U_W	P7S_WK
B.W19	knowledge of the principles of conducting a simplified market analysis for the planning of physiotherapy services and activities;	P7U_W	P7S_WK
B.W20	knowledge of the history of physiotherapy, trends in professional education and training, and international physiotherapy organisations and other associations representing physiotherapists;	P7U_W	P7S_WG
B.W21	knowledge of information technology and statistical tools used for data processing, presentation, and problem-solving;	P7U_W	P7S_WG P7S_WK
C. FOUNDATIONS OF PHYSIOTHERAPY			
C.W01	knowledge of the concepts related to medical rehabilitation, physiotherapy, and disability;	P7U_W	P7S_WG
C.W02	knowledge of the mechanisms of structural and functional disorders caused by disease or injury;	P7U_W	P7S_WG
C.W03	knowledge of the mechanisms of action and possible adverse effects of physiotherapeutic interventions and treatment modalities;	P7U_W	P7S_WG P7S_WK
C.W04	knowledge of methods for assessing structural and functional impairments caused by disease or injury, diagnostic tools and patient assessment methods used in physiotherapy, as well as methods for evaluating the patient's body structure, body functions, and activity in various disease conditions;	P7U_W	P7S_WG P7S_WK

C.W05	knowledge of the principles for selecting therapeutic agents, forms, and methods according to the type of dysfunction, as well as the patient's condition and age;	P7U_W	P7S_WG
C.W06	knowledge of the theoretical and methodological foundations of the learning and teaching process of motor activities and motor skills;	P7U_W	P7S_WG
C.W07	knowledge of the theoretical, methodological, and practical foundations of kinesitherapy, manual therapy, massage, and specialised physiotherapy methods;	P7U_W	P7S_WG
C.W08	knowledge of the indications and contraindications for exercises used in kinesitherapy, manual therapy, massage, and specialised physiotherapy methods;	P7U_W	P7S_WG P7S_WK
C.W09	knowledge of the theoretical, methodological, and practical foundations of physical therapy, balneoclimatology, and biological regeneration (recovery and wellness therapies);	P7U_W	P7S_WG
C.W10	knowledge of the indications and contraindications for the use of physical therapy, balneoclimatology, and biological regeneration procedures;	P7U_W	P7S_WG P7S_WK
C.W11	knowledge of the principles for selecting various forms of adapted physical activity, sport, tourism, and therapeutic recreation in the treatment process and maintenance of functional capacity in persons with special needs, including persons with disabilities;	P7U_W	P7S_WG P7S_WK
C.W12	knowledge of legal regulations concerning the participation of persons with disabilities in disability sport, including the Paralympic Games and Special Olympics, as well as organisations operating in the field of physical activity for persons with disabilities;	P7U_W	P7S_WK
C.W13	knowledge of training-related risks and limitations associated with disability;	P7U_W	P7S_WG P7S_WK
C.W14	knowledge of the principles of operation and application of medical devices used in the treatment of individuals with various diseases and organ dysfunctions;	P7U_W	P7S_WG P7S_WK
C.W15	knowledge of regulations concerning the list of reimbursable medical devices as specified in legal acts issued pursuant to Article 38(4) of the Polish Act of 12 May 2011 on the reimbursement of medicines, foodstuffs intended for particular nutritional uses, and medical devices;	P7U_W	P7S_WG
C.W16	knowledge of the indications and contraindications for the use of medical devices;	P7U_W	P7S_WG P7S_WK
C.W17	knowledge of issues related to health promotion and physioprophylaxis (physiotherapy-based disease prevention);	P7U_W	P7S_WG
D. CLINICAL PHYSIOTHERAPY			
D.W01	knowledge of the etiology, pathomechanism, symptoms, and course of musculoskeletal dysfunctions in the fields of orthopaedics and traumatology, sports medicine, rheumatology, neurology and neurosurgery, as well as paediatrics and paediatric neurology, to the extent enabling the rational use of physiotherapeutic interventions;	P7U_W	P7S_WG
D.W02	knowledge of diagnostic principles and general principles and methods of treatment of the most common musculoskeletal dysfunctions in the fields of orthopaedics and traumatology, sports medicine, rheumatology, neurology, neurosurgery, paediatrics and paediatric neurology, to the extent enabling the rational use of physiotherapeutic interventions;	P7U_W	P7S_WG P7S_WK

D.W03	knowledge of the etiology, pathomechanism, symptoms, and course of the most common diseases in the fields of cardiology and cardiac surgery, pulmonology, surgery, gynaecology and obstetrics, geriatrics, psychiatry, intensive care, oncology, and palliative medicine, to the extent enabling the rational use of physiotherapeutic interventions;	P7U_W	P7S_WG
D.W04	knowledge of diagnostic principles and general principles and methods of treatment in the most common diseases in the fields of cardiology and cardiac surgery, pulmonology, surgery, gynaecology and obstetrics, geriatrics, psychiatry, intensive care, oncology, and palliative medicine, to the extent enabling the rational use of physiotherapeutic interventions;	P7U_W	P7S_WG P7S_WK
D.W05	knowledge of the principles of patient management in unconscious patients, patients with multi-site and multi-organ trauma, spinal and spinal cord injuries, and injuries of the upper and lower limbs, with regard to the safe application of physiotherapy methods;	P7U_W	P7S_WG P7S_WK
D.W06	knowledge of general principles of subjective and objective examination in cardiology, neurology, orthopaedics, and geriatrics;	P7U_W	P7S_WG
D.W07	knowledge of the interpretation of additional test results in the diagnosis of cardiovascular diseases and in cardiological physiotherapy, including electrocardiography (EKG), ultrasound examinations, ECG stress tests, and clinical assessment of a patient's health status using various scales, with regard to the safe application of physiotherapy methods;	P7U_W	P7S_WG
D.W08	knowledge of exercise test results in cardiological and pulmonological physiotherapy (cycle ergometer test, treadmill test, walking tests, spiroergometric test), the New York Heart Association (NYHA) heart failure scale, and metabolic equivalent (MET) values;	P7U_W	P7S_WG
D.W09	knowledge of general principles of subjective and objective pulmonary examination for physiotherapy purposes, important additional and auxiliary tests, and functional tests useful in qualification and monitoring of respiratory physiotherapy;	P7U_W	P7S_WG
D.W10	knowledge of principles of qualification for surgical procedures and basic surgical interventions, including vascular amputations and minimally invasive surgery procedures;	P7U_W	P7S_WG
D.W11	knowledge of methods of clinical examination and additional diagnostics in the field of gynaecology and obstetrics;	P7U_W	P7S_WG
D.W12	knowledge of the physiology of ageing and principles of geriatric care and physiotherapy;	P7U_W	P7S_WG
D.W13	knowledge of risks associated with hospitalisation of elderly patients;	P7U_W	P7S_WG P7S_WK
D.W14	knowledge of the specifics of managing patients with mental illness and principles of appropriate interaction with them;	P7U_W	P7S_WG
D.W15	knowledge of management principles for patients who are unconscious, in acute circulatory failure, acute respiratory failure, shock, diagnosed sepsis, mechanically ventilated, after traumatic brain injury, and after multiple trauma;	P7U_W	P7S_WG
D.W16	knowledge of the principles of the international classification of functioning, disability and health (ICF);	P7U_W	P7S_WG
E. RESEARCH METHODOLOGY			

E.W01	knowledge of research methods and techniques used in the conduct of scientific research;	P7U_W	P7S_WG P7S_WK
F. PHYSIOTHERAPY PRACTICE PLACEMENTS			
F.W01	knowledge of physical phenomena occurring in the human body under the influence of external factors;	P7U_W	P7S_WG
F.W02	knowledge of the theoretical, methodological, and practical foundations of kinesitherapy and manual therapy, specialised physiotherapy methods, ergonomics, physical therapy, and therapeutic massage;	P7U_W	P7S_WG
F.W03	knowledge of methods for assessing the condition of the human musculoskeletal system used to explain structural and functional disorders of this system and for physiotherapy purposes in musculoskeletal dysfunctions and internal diseases;	P7U_W	P7S_WG
F.W04	knowledge of methods for assessing structural and functional impairments caused by disease or injury, as well as basic human responses to illness and pain, to the extent necessary for physiotherapy;	P7U_W	P7S_WG
F.W05	knowledge of methods for describing and interpreting basic disease entities and syndromes to the extent enabling the rational use of physiotherapeutic interventions and physiotherapy planning;	P7U_W	P7S_WG
F.W06	knowledge of the foundations of health education, health promotion, and disease prevention, including aspects related to disability;	P7U_W	P7S_WG
F.W07	knowledge of principles for selecting various forms of adapted physical activity and sports disciplines for persons with disabilities in comprehensive rehabilitation and maintenance of functional capacity in individuals with special needs;	P7U_W	P7S_WG
F.W08	knowledge of the principles of operation of medical devices used in rehabilitation;	P7U_W	P7S_WG
F.W09	knowledge of ethical principles applicable in patient care;	P7U_W	P7S_WG
F.W10	knowledge of evidence-based practice in physiotherapy (evidence-based medicine/physiotherapy);	P7U_W	P7S_WG
F.W11	knowledge of physiotherapy standards;	P7U_W	P7S_WG
F.W12	knowledge of the role of the physiotherapist in the process of comprehensive rehabilitation and of other specialists within the therapeutic team;	P7U_W	P7S_WG
F.W13	knowledge of legal, ethical, and methodological aspects of conducting clinical research and the role of the physiotherapist in such research;	P7U_W	P7S_WG
F.W14	knowledge of health promotion principles, its objectives, and the role of the physiotherapist in promoting a healthy lifestyle;	P7U_W	P7S_WG
F.W15	knowledge of basic psychosomatic relationships and methods related to body awareness development;	P7U_W	P7S_WG
F.W16	knowledge of the tasks of the individual bodies of the professional self-government of physiotherapists and the rights and duties of its members;	P7U_W	P7S_WG
F.W17	knowledge of professional ethics of the physiotherapist;	P7U_W	P7S_WG
F.W18	knowledge of the principles of professional responsibility of the physiotherapist;	P7U_W	P7S_WG
SKILLS **The graduate is able to:**			
K_U01	perform treatments in the field of physical therapy, kinesiotherapy, massage and manual therapy, as well as special methods of physiotherapy;	P7U_U	P7S_UW

K_U02	interpret the results of functional examinations and carry out the functional tests necessary for the selection of physiotherapy measures and interpret their results;	P7U_U	P7S_UW
K_U03	create, verify and modify physiotherapy programmes for persons with various dysfunctions, including the elderly, in accordance with their clinical and functional condition, as well as within the framework of the comprehensive rehabilitation process;	P7U_U	P7S_UW
K_U04	monitor the effects of physiotherapeutic procedures	P7U_U	P7S_UW
K_U05	select medical devices appropriate to the type of dysfunction and the patient's needs at every stage of rehabilitation and instruct the patient on how to use them;	P7U_U	P7S_UW
K_U06	apply activities in the field of adapted physical activity and sport for persons with disabilities for the planning, selection, modification and creation of various forms of recreational and sports activities for persons with special needs, including the elderly;	P7U_U	P7S_UW
K_U07	apply activities aimed at health education, health promotion, the prevention of disability, as well as primary and secondary prevention of diseases;	P7U_U	P7S_UW P7S_UK
K_U08	demonstrate the high level of physical fitness necessary for the correct demonstration and performance of treatments in the field of kinesiotherapy, massage and manual therapy, and the application of special methods in persons with various diseases, dysfunctions and various types and degrees of disability;	P7U_U	P7S_UW
K_U09	plan their own educational activity and continuously further their education in order to update their knowledge;	P7U_U	P7S_UU
K_U10	inspire others to learn and to undertake physical activity;	P7U_U	P7S_UU
K_U11	communicate with the patient and the patient's family in an atmosphere of trust, taking into account the patient's needs and rights;	P7U_U	P7S_UK
K_U12	communicate with co-workers in a team and share knowledge;	P7U_U	P7S_UK P7S_UO
K_U13	use knowledge in the field of the rationalisation and optimisation of physiotherapy, also while cooperating within a therapeutic team	P7U_U	P7S_UO
K_U14	act in accordance with ethical and bioethical principles in performing activities appropriate to the profession of physiotherapist	P7U_U	P7S_UW
A. BIOMEDICAL FOUNDATIONS OF PHYSIOTHERAPY			
A.U01	ability to identify and locate on anatomical models and phantoms the principal structures of the human body, including elements of the musculoskeletal system such as bones and joints, muscle groups, and individual muscles;	P7U_U	P7S_UW P7S_UO P7S_UU
A.U02	ability to palpate and identify selected anatomical structures and their relationships with neighbouring structures, including bony landmarks serving as muscle and ligament attachment sites, anthropometric measurement points, superficial muscles, tendons, and selected neurovascular bundles;	P7U_U	P7S_UW P7S_UO P7S_UU
A.U03	ability to determine biochemical parameters and their changes in the course of certain diseases and under the influence of physical exercise, to the extent necessary for the safe application of physiotherapy methods;	P7U_U	P7S_UW P7S_UO P7S_UU
A.U04	ability to measure and interpret basic cardiovascular parameters (heart rate, blood pressure), blood composition, and static and dynamic respiratory parameters, as well as to assess reflexes at all levels of the	P7U_U	P7S_UW P7S_UO P7S_UU

	nervous system, to the extent necessary for the safe application of physiotherapy methods;		
A.U05	ability to perform basic examination of sensory organs and assess balance;	P7U_U	P7S_UW P7S_UO P7S_UU
A.U06	ability to assess exercise capacity, exercise tolerance, fatigue level, and overtraining;	P7U_U	P7S_UW P7S_UO P7S_UU
A.U07	ability to use the properties of selected groups of pharmacological agents in physiotherapeutic procedures in various diseases;	P7U_U	P7S_UW P7S_UO P7S_UU
A.U08	ability to assess the impact of physical factors on the human body, distinguishing between normal and abnormal reactions;	P7U_U	P7S_UW P7S_UO P7S_UU
A.U09	ability to assess the condition of the human musculoskeletal system in static and dynamic conditions (general, regional, and local examination) in order to identify structural and functional disorders;	P7U_U	P7S_UW P7S_UO P7S_UU
A.U10	ability to perform detailed biomechanical analysis of simple and complex human movements in normal conditions and in various musculoskeletal disorders;	P7U_U	P7S_UW P7S_UO P7S_UU
A.U11	ability to predict the effects of different mechanical loads on pathologically altered structures of the human body;	P7U_U	P7S_UW P7S_UO P7S_UU
A.U12	ability to assess individual motor skills;	P7U_U	P7S_UW P7S_UO P7S_UU
A.U13	ability to assess physical and functional fitness based on current tests for all age groups;	P7U_U	P7S_UW P7S_UO P7S_UU
A.U14	ability to conduct a patient interview and analyse collected information required for physiotherapy practice;	P7U_U	P7S_UW P7S_UK P7S_UO P7S_UU
A.U15	ability to recognise life- or health-threatening situations and provide qualified first aid in emergency conditions, as well as perform cardiopulmonary resuscitation (CPR) in adults and children;	P7U_U	P7S_UW P7S_UK P7S_UO P7S_UU
B. GENERAL ACADEMIC SUBJECTS			
B.U01	ability to communicate in at least one foreign language at B2+ level of the Common European Framework of Reference for Languages (CEFR);	P7U_U	P7S_UW P7S_UK P7S_UU
B.U02	ability to identify and recognise psychological problems in individuals, including older adults and patients with various dysfunctions and at different ages, to the extent necessary for the safe application of physiotherapy methods, and to assess their impact on the course and effectiveness of physiotherapy;	P7U_U	P7S_UW P7S_UK
B.U03	ability to apply appropriate therapeutic and educational approaches supporting the rehabilitation process of persons with disabilities;	P7U_U	P7S_UW
B.U04	ability to organise activities aimed at health education, health promotion, and disability prevention;	P7U_U	P7S_UW P7S_UO
B.U05	ability to conduct screening examinations for the prevention of dysfunctions and disability;	P7U_U	P7S_UW P7S_UO

B.U06	ability to estimate the cost of physiotherapy interventions;	P7U_U	P7S_UW
B.U07	ability to perform a simplified market analysis for the planning of physiotherapy-related activities;	P7U_U	P7S_UW P7S_UK
B.U08	ability to identify basic ethical issues related to contemporary medicine and the protection of life and health, and to take into account patients' cultural, religious, and ethnic backgrounds in physiotherapy planning and practice;	P7U_U	P7S_UW P7S_UK
B.U09	ability to demonstrate motor skills in selected forms of physical activity (recreational and health-related);	P7U_U	P7S_UW
B.U10	ability to conduct patient interviews with adults, children, and families using active listening and empathy, and to communicate with patients about their health condition in a climate of trust throughout the physiotherapy process;	P7U_U	P7S_UW P7S_UK
B.U11	ability to inform patients about the purpose, course, and potential risks of diagnostic and physiotherapy interventions and to obtain informed consent;	P7U_U	P7S_UW P7S_UK P7S_UO
B.U12	ability to communicate with team members by providing feedback and professional support.	P7U_U	P7S_UK P7S_UO
C. FOUNDATIONS OF PHYSIOTHERAPY			
C.U01	ability to conduct subjective and objective examinations, as well as perform basic functional assessments and tests relevant to physiotherapy, including measurements of limb length and circumference, joint range of motion, and muscle strength;	P7U_U	P7S_UW P7S_UK
C.U02	ability to complete medical documentation of the patient's health status and physiotherapy treatment programme;	P7U_U	P7S_UW P7S_UK P7S_UO
C.U03	ability to select and conduct kinesitherapy aimed at developing specific motor abilities in healthy individuals and patients with various dysfunctions, to conduct exercise sessions with a defined therapeutic goal, and to perform gait re-education, postural education and re-education, and upper limb functional re-education;	P7U_U	P7S_UW
C.U04	ability to instruct patients in home exercise programmes, the use of medical devices, and the therapeutic use of everyday objects, as well as to instruct caregivers in the care of individuals with special needs and children in order to support normal development;	P7U_U	P7S_UW P7S_UK
C.U05	ability to design therapeutic training programmes, including various exercises, adapt exercises to patients' needs, select appropriate equipment and exercise aids, and appropriately progress exercise difficulty;	P7U_U	P7S_UW
C.U06	ability to select specific exercises for individuals with different dysfunctions and functional capacities and to teach their execution systematically, progressively increasing difficulty and physical effort;	P7U_U	P7S_UW
C.U07	ability to demonstrate motor skills necessary for safe instruction and supervision during exercise performance;	P7U_U	P7S_UW
C.U08	ability to plan, select, and perform procedures in kinesitherapy, manual therapy, massage, and specialised physiotherapy methods;	P7U_U	P7S_UW
C.U09	ability to operate and apply equipment used in kinesitherapy, physical therapy, massage, manual therapy, and specialised physiotherapy methods;	P7U_U	P7S_UW
C.U10	ability to demonstrate advanced manual skills enabling the application of appropriate techniques in kinesitherapy, massage, manual therapy, and specialised physiotherapy methods;	P7U_U	P7S_UW

C.U11	ability to plan, select, and perform physical therapy, balneoclimatology, and biological regeneration procedures;	P7U_U	P7S_UW
C.U12	ability to operate equipment used in physical therapy, balneoclimatology, and biological regeneration;	P7U_U	P7S_UW
C.U13	ability to instruct persons with special needs, including persons with disabilities, in various forms of adapted physical activity, sport, tourism, and therapeutic recreation;	P7U_U	P7S_UW P7S_UK
C.U14	ability to instruct persons with disabilities in self-care and mobility, including independent movement and overcoming environmental obstacles using an active wheelchair;	P7U_U	P7S_UW P7S_UK
C.U15	ability to conduct sports training sessions in selected disciplines for persons with disabilities, including demonstration of technical and tactical elements in adapted sports;	P7U_U	P7S_UW
C.U16	ability to select medical devices according to the type of dysfunction and patient needs at every stage of physiotherapy, and to instruct patients in their use;	P7U_U	P7S_UW P7S_UK
C.U17	ability to promote healthy lifestyles at various levels and design prevention programmes depending on the patient's age, sex, health status, and living conditions, with particular emphasis on physical activity.	P7U_U	P7S_UW
D. CLINICAL PHYSIOTHERAPY			
D.U01	ability to perform a detailed physiotherapy assessment and functional tests of the musculoskeletal system, as well as record and interpret the obtained results;	P7U_U	P7S_UW P7S_UK
D.U02	ability to perform biomechanical analysis of simple and complex human movements in normal conditions and in musculoskeletal dysfunctions;	P7U_U	P7S_UW
D.U03	ability to assess the condition of the musculoskeletal system in static and dynamic conditions (general, regional, and local examination), perform gait analysis, and interpret the obtained results;	P7U_U	P7S_UW
D.U04	ability to select and perform physiotherapeutic procedures depending on the patient's clinical and functional condition in individuals after soft tissue injuries of the musculoskeletal system treated conservatively or surgically, after limb injuries (contusions, sprains, dislocations, and fractures) treated conservatively or surgically, and after spinal injuries without paralysis as well as stable and unstable spinal fractures;	P7U_U	P7S_UW
D.U05	ability to select and perform physiotherapeutic procedures depending on the patient's clinical and functional condition in patients after planned and traumatic amputations, conduct gait training with a prosthesis, and manage post-amputation care of the upper limb, including instruction in prosthesis use;	P7U_U	P7S_UW P7S_UK
D.U06	ability to manage pre- and postoperative physiotherapy depending on the patient's clinical and functional condition in individuals after reconstructive orthopaedic procedures, including arthroscopic procedures and joint replacement surgery;	P7U_U	P7S_UW
D.U07	ability to instruct patients or caregivers in home exercise programmes, the use of medical devices, and the therapeutic use of everyday objects;	P7U_U	P7S_UW P7S_UK
D.U08	ability to perform functional tests used in rheumatology, such as assessment of joint damage and deformities, hand function, and locomotion in patients with rheumatic diseases;	P7U_U	P7S_UW

D.U09	ability to plan, select, and perform physiotherapy interventions depending on the patient's clinical and functional condition in patients with rheumatic diseases, enthesopathies, degenerative joint disease, reduced range of motion, or extra-articular pain syndromes of rheumatic origin;	P7U_U	P7S_UW
D.U10	ability to perform verticalisation and gait training in patients with rheumatic diseases, as well as functional rehabilitation of the hand in rheumatoid arthritis;	P7U_U	P7S_UW
D.U11	ability to instruct patients with rheumatic diseases in home exercise programmes and the use of medical devices, including devices improving hand function;	P7U_U	P7S_UW P7S_UK
D.U12	ability to perform neurological assessment for physiotherapy purposes and functional tests used in neurological physiotherapy, including assessment of muscle tone, clinical assessment of spasticity, and evaluation of body function and activity using clinical scales, as well as interpretation of major diagnostic tests (imaging and electrophysiological studies);	P7U_U	P7S_UW
D.U13	ability to plan, select, and perform physiotherapy interventions in patients with lesions of the brainstem, cerebellum, and cerebrum, particularly after stroke, in Parkinson's disease, and in demyelinating diseases, as well as in patients after spinal fractures with paralysis, including management aimed at reducing trophic and excretory disorders, verticalisation, and gait or wheelchair mobility training;	P7U_U	P7S_UW
D.U14	ability to plan, select, and perform physiotherapy interventions in patients with peripheral nerve injuries, polyneuropathies, neuromuscular diseases, primary muscle diseases, and various pain syndromes;	P7U_U	P7S_UW
D.U15	ability to position patients in bed and perform in-bed kinesitherapy in patients with nervous system damage, conduct verticalisation and gait training, and perform upper limb motor re-education after stroke;	P7U_U	P7S_UW
D.U16	ability to instruct neurological patients in home exercise programmes, the use of medical devices, and the therapeutic use of everyday objects;	P7U_U	P7S_UW P7S_UK
D.U17	ability to conduct patient interviews and collect basic information on child development and health status;	P7U_U	P7S_UW P7S_UK
D.U18	ability to assess a child's psychomotor development;	P7U_U	P7S_UW
D.U19	ability to assess spontaneous activity in newborns and infants;	P7U_U	P7S_UW
D.U20	ability to assess a child's functional abilities in motor skills and communication using appropriate scales;	P7U_U	P7S_UW
D.U21	ability to clinically assess increased or decreased muscle tone in children, including spasticity and rigidity;	P7U_U	P7S_UW
D.U22	ability to clinically assess posture, including scoliometer (Bunnell) examination, point-based and biostereometric posture assessment, and interpretation of results;	P7U_U	P7S_UW
D.U23	ability to determine Cobb angle and vertebral rotation from spinal X-rays, assess bone age using the Risser test, interpret results, and classify scoliosis for appropriate physiotherapeutic management;	P7U_U	P7S_UW
D.U24	ability to plan, select, and conduct physiotherapy interventions in children and adolescents with musculoskeletal disorders such as congenital defects, postural defects, and aseptic bone necrosis;	P7U_U	P7S_UW
D.U25	ability to manage pre- and postoperative physiotherapy in children undergoing surgical treatment;	P7U_U	P7S_UW

D.U26	ability to plan, select, and conduct physiotherapy interventions in children and adolescents with central motor disorders, cerebral palsy, spina bifida, neuromuscular diseases, perinatal brachial plexus and peripheral nerve injuries, and neurogenic and myogenic muscle atrophies and dystrophies;	P7U_U	P7S_UW
D.U27	ability to instruct caregivers in movement handling techniques and children and caregivers in home exercise programmes, use of medical devices, and therapeutic use of everyday objects;	P7U_U	P7S_UW P7S_UK
D.U28	ability to perform basic functional tests and measurements while ensuring safety, including heart rate, blood pressure, walking tests, the Timed Up and Go (TUG) test, treadmill tests using Bruce and modified Naughton protocols, and cycle ergometer exercise tests;	P7U_U	P7S_UW
D.U29	ability to plan, select, and perform physiotherapy interventions in patients with heart failure, hypertension, ischaemic heart disease, post-myocardial infarction, arrhythmias, and acquired heart defects;	P7U_U	P7S_UW
D.U30	ability to plan, select, and perform physiotherapy interventions in patients before and after cardiac surgery, in patients with pacemakers, and after interventional cardiology procedures;	P7U_U	P7S_UW
D.U31	ability to instruct patients in breathing exercises and relaxation techniques in cardiological physiotherapy;	P7U_U	P7S_UW P7S_UK
D.U32	ability to instruct cardiovascular patients in home exercise programmes and physical activity for secondary prevention;	P7U_U	P7S_UW P7S_UK
D.U33	ability to perform respiratory function tests, including spirometry, and interpret spirometry, exercise test, and blood gas analysis results;	P7U_U	P7S_UW
D.U34	ability to plan, select, and perform exercises in acute and chronic respiratory diseases, in restrictive and obstructive lung disorders;	P7U_U	P7S_UW
D.U35	ability to perform respiratory physiotherapy in pulmonary diseases, after chest trauma, after thoracic surgery, and after lung transplantation;	P7U_U	P7S_UW
D.U36	ability to instruct respiratory patients in home exercise programmes and secondary prevention measures;	P7U_U	P7S_UW P7S_UK
D.U37	ability to plan, select, and perform physiotherapy interventions in patients with functional and organic peripheral vascular diseases and after vascular amputations;	P7U_U	P7S_UW
D.U38	ability to implement early mobilisation strategies after abdominal or thoracic surgery, perform lung expansion and airway clearance techniques, provide education on prevention of early and late postoperative complications, and give recommendations for outpatient postoperative physiotherapy;	P7U_U	P7S_UW
D.U39	ability to apply the International Classification of Functioning, Disability and Health (ICF);	P7U_U	P7S_UW
D.U40	ability to plan, select, and perform postpartum physiotherapy interventions aimed at reducing adverse symptoms, particularly related to the cardiovascular, musculoskeletal, and neuromuscular systems;	P7U_U	P7S_UW
D.U41	ability to instruct pregnant women in exercises preparing for childbirth and in the postpartum period;	P7U_U	P7S_UW P7S_UK
D.U42	ability to perform physiotherapy in patients with urinary incontinence and instruct them in home exercise programmes;	P7U_U	P7S_UW P7S_UK

D.U43	ability to plan and select cardiopulmonary exercises for children and adolescents according to clinical and functional status and instruct caregivers and patients in their performance;	P7U_U	P7S_UW P7S_UK
D.U44	ability to perform comprehensive geriatric assessment and interpret its results;	P7U_U	P7S_UW
D.U45	ability to select and perform geriatric physiotherapy interventions and instruct elderly patients in home exercise programmes and recreational activities;	P7U_U	P7S_UW P7S_UK
D.U46	ability to plan, select, and perform physiotherapy interventions in women after mastectomy, including management of lymphedema and upper limb dysfunction;	P7U_U	P7S_UW
D.U47	ability to apply principles of effective patient communication and communicate within the therapeutic team;	P7U_U	P7S_UK P7S_UO
D.U48	ability to undertake actions aimed at improving patient quality of life, including palliative patients, using rehabilitation equipment;	P7U_U	P7S_UW
D.U49	ability to plan, select, and modify rehabilitation programmes for patients with musculoskeletal and internal diseases depending on clinical, functional, and psychological condition, as well as patient and caregiver needs.	P7U_U	P7S_UW
E. RESEARCH METHODOLOGY			
E.U01	ability to design a scientific study and discuss its aim and expected results;	P7U_U	P7S_UW P7S_UK
E.U02	ability to interpret scientific research and relate it to the current state of knowledge;	P7U_U	P7S_UW
E.U03	ability to use specialised national and international scientific literature;	P7U_U	P7S_UW
E.U04	ability to conduct scientific research, interpret, and document its results;	P7U_U	P7S_UW
E.U05	ability to present scientific research results;	P7U_U	P7S_UW
F. PHYSIOTHERAPY PRACTICE PLACEMENTS			
F.U01	ability to perform examinations and interpret their results, as well as carry out functional tests necessary for the selection of physiotherapeutic interventions, the implementation of treatments, and the application of basic therapeutic methods;	P7U_U	P7S_UW
F.U02	ability to independently perform procedures in kinesitherapy, manual therapy, physical therapy, and therapeutic massage;	P7U_U	P7S_UW
F.U03	ability to develop, verify, and modify rehabilitation programmes for individuals with various musculoskeletal and other organ and system dysfunctions, in accordance with their clinical and functional status and the goals of comprehensive rehabilitation;	P7U_U	P7S_UW
F.U04	ability to demonstrate specialised motor skills in selected forms of physical activity;	P7U_U	P7S_UW
F.U05	ability to select medical devices according to the type of dysfunction and patient needs at each stage of rehabilitation;	P7U_U	P7S_UW
F.U06	ability to apply medical devices and instruct patients in their use;	P7U_U	P7S_UW
F.U07	ability to operate physiotherapy equipment, therapeutic devices, and functional assessment tools, as well as prepare the workplace;	P7U_U	P7S_UW
F.U08	ability to work within an interdisciplinary team ensuring continuity of patient care and to communicate effectively with team members, patients, and their families;	P7U_U	P7S_UW

F.U09	ability to enter data, collected information, and descriptions of therapeutic effects into patient medical documentation;	P7U_U	P7S_UW
F.U10	ability to initiate, organise, and implement activities aimed at health education, health promotion, and disability prevention;	P7U_U	P7S_UW
F.U11	ability to define the scope of professional competences and cooperate with representatives of other healthcare professions;	P7U_U	P7S_UW
F.U12	ability to independently perform assigned tasks, organise one's own work effectively, and take responsibility for it;	P7U_U	P7S_UW
F.U13	ability to work in a team and assume responsibility for participation in decision-making processes;	P7U_U	P7S_UW
F.U14	ability to actively participate in therapeutic team activities;	P7U_U	P7S_UW
F.U15	ability to actively participate in discussions on professional issues, with respect for ethical principles;	P7U_U	P7S_UW
F.U16	ability to comply with professional deontology, including the ethical code of physiotherapists;	P7U_U	P7S_UW
F.U17	ability to respect patient rights;	P7U_U	P7S_UW
FU18	ability to establish relationships with patients and colleagues based on mutual trust and respect.	P7U_U	P7S_UW
SOCIAL COMPETENCES The graduate is ready to:			
K_K01	establish and maintain contact with the patient based on full respect, as well as to show understanding for worldview and cultural differences;	P7U_K	P7S_KK P7S_KO P7S_KR
K_K02	practise the profession while being aware of the role that the physiotherapist plays for society, including the local community;	P7U_K	P7S_KK P7S_KO P7S_KR
K_K03	present an attitude promoting a healthy lifestyle, propagate and actively create a healthy lifestyle and health promotion in the course of activities related to practising the profession, and determine the level of fitness necessary to practise the profession of physiotherapist;	P7U_K	P7S_KK P7S_KO P7S_KR
K_K04	observe patients' rights and the principles of professional ethics;	P7U_K	P7S_KK P7S_KO P7S_KR
K_K05	perceive and recognise one's own limitations, and carry out a self-assessment of educational deficits and needs;	P7U_K	P7S_KK P7S_KO P7S_KR
K_K06	use objective sources of information;	P7U_K	P7S_KK P7S_KO P7S_KR
K_K07	implement the principles of professional collegiality and cooperation within a team of specialists, including representatives of other medical professions, also in a multicultural and multinational environment;	P7U_K	P7S_KK P7S_KO P7S_KR
K_K08	formulate opinions concerning various aspects of professional activity;	P7U_K	P7S_KK P7S_KO P7S_KR
K_K09	assume responsibility related to decisions taken in the course of professional activity, including in terms of one's own safety and the safety of others.	P7U_K	P7S_KK P7S_KO P7S_KR

3. DURATION, PRINCIPLES AND FORM OF PROFESSIONAL PLACEMENTS, NUMBER OF ECTS CREDITS FOR THE FIELD OF STUDY

Professional placements have been assigned a total of 58 ECTS credits and will be carried out over 7 semesters during the course of studies. Distribution of ECTS credits:

- Semester III - 5 ECTS credits Assistant placement
- Semester IV - 11 ECTS credits Summer placement in kinesiotherapy

- Semester V - 4 ECTS credits Placement in clinical physiotherapy, physical therapy and massage
- Semester VI - 7 ECTS credits Profiled summer placement – elective
- Semester VII - 4 ECTS credits Placement in clinical physiotherapy – physical therapy and massage
- Semester VIII - 7 ECTS credits Profiled summer placement – elective
- Semester X - 20 ECTS credits Placement in clinical physiotherapy, physical therapy and massage – semester placement

Ways and possibilities of carrying out student placements at the University, i.e.:

1. **Placement carried out at an entity chosen by the student, arranged independently by the Student;**
2. Placement organised by the University.

4. SELECTION OF COURSE MODULES BY STUDENTS INCLUDED IN THE STUDY PROGRAMME

The elective modules/courses comprise:

- Foreign language courses with elements of specialised language – 8 ECTS credits;
- Diploma Seminar and Diploma Examination – 22 ECTS credits;
- ICF classification (in a foreign language) – 1 ECTS credit;
- Economics and health care systems, and management and marketing (in a foreign language) 1 ECTS credit;
- University elective offer (G); Specialisation: Physiotherapy in Sport (G1, alternative to G2); Physiotherapy in Geriatric Care (G2, alternative to G1) – 12 + 9 ECTS;
- Profiled summer placement – elective 14 ECTS credits;
- Common (elective) modules delivered jointly with the field of study Sports Diagnostics and Coaching (3 out of 6 modules – one each in semesters II, IV and VI) – 9 ECTS credits;

Together they constitute 76 ECTS credits, which amounts to 25% of the total number of ECTS credits assigned to the field of study both in full-time studies and in part-time studies.

5. NUMBER OF ECTS CREDITS DEVELOPING PRACTICAL SKILLS IN A STUDY PROGRAMME WITH A PRACTICAL PROFILE

The study programme for the field of study Physiotherapy, long-cycle (single-cycle) Master's studies, contains 8 thematic groups of courses whose scope also covers preparation for the practical practice of the profession. For completing them, the student receives a total of 219 ECTS credits, which constitutes 73% of the total number of ECTS credits

6. COURSES OR GROUPS OF COURSES TOGETHER WITH THE LEARNING OUTCOMES ASSIGNED TO THEM AND THE COURSE CONTENT ENSURING THE ACHIEVEMENT OF THESE OUTCOMES

No.	Module/ Course:	Learning outcomes in the area of:			Course content:	Form of completion (ZAO, EGZ)	Method of verifying and assessing the learning outcomes
		knowledge	skills	social competences			
1.	ADAPTED PHYSICAL ACTIVITY	W01, W02	U01, U02, U03	K01, K02	Lectures: 1. Presentation of the characteristics of the course and the issues covered, as well as the form of completion of the course and the literature. Aims and conditions of adapted physical activity. Active Rehabilitation, stages of AR, aims, camps, regional activity. The place of this system in the process of comprehensive rehabilitation. 2. Factors influencing the adaptation of a person with a disability to life in society. Problems of people with special needs in adapting to everyday life. 3. Principles of selecting various forms of adapted physical activity, sport and therapeutic recreation to the patient's disability. 4. The specificity of physical activity of people with sensory and motor disabilities. Possible risks and training limitations related to disability. 5. Adaptive physical activity as a way to maintain the fitness achieved, taking into account the division according to age, sex, and type of disability 6. Adaptive physical activity as a means of integrating people with special needs into society and as a means of maintaining the physical fitness and mental condition achieved. Programming adaptive physical activity in the process of rehabilitation, recreation and physical education.	ZAO	W01-W02, K01-K02 active participation in classes – observation during classes W01-W02, U01-U03 written test with closed-ended single-choice questions and/or open-ended problem questions, U01-U03 practical demonstration of work with a person with a disability sensory and motor. The graded credit is the arithmetic mean of the grades from all forms of verification.

					Classes: 1. Organizational and introductory session. Familiarizing students with the subject matter and the criteria for completion. The aim and specific nature of conducting practical classes with a person with special needs. Learning to conduct physical activity classes for persons with locomotor system impairment in the field of adapted physical activity 3. The motor skills of the therapist needed to teach active wheelchair handling and to ensure safety during classes. Methods of safeguarding and transferring persons moving in a wheelchair within the forms of adapted physical activity, sport, and therapeutic recreation. Instructing the patient on the possibilities of moving and overcoming obstacles in an active wheelchair. Instructing the patient in the field of self-care. 4. Learning to conduct physical activity classes for persons with visual impairment in the field of adapted physical activity. Instructing the patient/parent/carer of a person with visual impairment in the field of various forms of adapted physical activity, sport, and therapeutic recreation. Instruction in the field of self-care. The motor skills needed to demonstrate exercises and to ensure the patient's safety. 5. Methodology of conducting physical activity classes with persons with intellectual disabilities and social maladjustment. Instructing the patient/parent/carer in the field of forms of adapted physical activity, sport, and therapeutic recreation. Instruction in the field of self-care. The motor skills needed to demonstrate exercises and to ensure the patient's safety. 6. Learning to conduct classes with children with disabilities – instructing the patient/parent/carer in the field of forms of adapted physical activity, sport, and therapeutic recreation. Instruction in the field of self-care. The motor skills needed to demonstrate exercises and to ensure the patient's safety. 7. Learning to conduct classes in the field of		

					physical recreation for older persons – instructing the patient/carer in the field of forms of adapted physical activity and therapeutic recreation. Instruction in the field of self-care. The motor skills needed to demonstrate exercises and to ensure the patient's safety. 8. Recreational and sports activity of persons with developmental disorders. Physical activity classes targeted at improving life skills. instructing the patient/parent/carer in the field of forms of adapted physical activity and therapeutic recreation. Instruction in the field of self-care. The motor skills needed to demonstrate exercises and to ensure the patient's safety.		
2.	ANATOMY (normal, functional, palpatory and imaging anatomy)	W01 – W05	U01 – U03	K01 – K03	Lectures: Division of the skeleton, the spine. General structure of a vertebra. Structural features of the cervical, thoracic and lumbar vertebrae. The sacrum and the coccyx. Joints of the spine: intervertebral discs, ligaments of the spine, joints of the spine, connections of the spine with the skull. Mechanics of the spine. The thorax: ribs, sternum. Costovertebral joints, connections of the sternum. Mechanics of the thorax. 2. Bones of the shoulder girdle. The clavicle and the scapula. The sternoclavicular and acromioclavicular joints. Bones of the free upper limb: the humerus, the bones of the forearm (ulna and radius), the bones of the hand (carpus, metacarpus, fingers). Connections of the bones of the upper limb. The shoulder joint. The elbow joint. The distal radioulnar joint. The joints of the wrist. The joints of the metacarpus. The metacarpophalangeal joints. The interphalangeal joints. 3. The pelvis. The hip bone (ilium, pubis, ischium). The sacroiliac joint. The pubic symphysis. The pelvis as a whole. The femur. The hip joint. The bones of the lower leg. The tibia, the fibula. The bones of the foot: tarsus, metatarsus, toes. The knee joint. Connections of the bones of the leg. The upper and lower ankle joints. The joints of the foot. 4. Superficial and deep muscles of the thorax: the pectoralis major and minor, subclavius, serratus	EGZ	Written examination – test, theoretical tests Practical examination, activity in classes. Final grade – arithmetic mean of the individual courses

					anterior, external, internal and innermost intercostals, subcostals, transversus thoracis. Superficial muscles of the back: trapezius, latissimus dorsi, rhomboid, levator scapulae, serratus posterior superior and inferior. Deep muscles of the back: splenius, sacrospinalis, iliocostalis, longissimus, spinalis, transversospinales, multifidus, rotatores, – short muscles of the back. Functional anatomy – Functional anatomy (attachment, course, functions) of the muscles of the upper limb and the lower limb. Functional anatomy (attachment, course, functions) of the muscles of the spine, trunk and head. Anatomical chains (fascial lines) and their course and principles of functioning. 6. Vascularization of the walls of the thorax: the subclavian artery, the axillary artery, their courses and branches. The intercostal nerves, the phrenic nerves, the vagus nerves – their course and range of innervation. Muscles of the upper limb girdle (deltoid, supraspinatus, infraspinatus, teres minor, teres major, subscapularis). The anterior group of the muscles of the arm. The posterior group of the muscles of the arm. The anterior group of the muscles of the forearm 7. Muscles of the forearm, the lateral and posterior group, mechanics of the elbow joint, muscles of the hand /thenar, hypothenar, intermediate muscles of the hand/. 8. The axillary fossa, the cubital fossa, the carpal tunnel, the anatomical snuffbox, the brachial plexus supraclavicular and infraclavicular part, the subclavian artery /segments, branches/ 9. The axillary artery /segments, branches/, the brachial artery /segments, branches/, the superficial and deep palmar arch, the system of venous and superficial vessels, the lymphatic system of the upper limb 10. The abdominal regions, the abdominal muscles /external and internal oblique, transversus abdominis, rectus abdominis, pyramidalis, quadratus lumborum/. Sites of reduced resistance of the walls of the abdominal cavity /hernias/. The lumbar plexus. The vessels of the walls of the abdominal cavity		

					11. The floor of the lesser pelvis: the urogenital and pelvic diaphragm. The sacral plexus. The main structures of the retroperitoneal space. The organs, nerves and main vessels of the lesser pelvis, the muscles of the lower limb girdle /iliopsoas, gluteus maximus, gluteus medius, gluteus minimus, tensor fasciae latae, piriformis, obturator internus, gemelli, quadratus femoris, obturator externus/, the obturator canal, the suprapiriform foramen – its boundaries and contents, the posterior group of the muscles of the thigh, the anterior group of the muscles of the thigh, the medial group of the muscles of the thigh 13. Boundaries and contents of the femoral triangle, the adductor canal, the muscles of the lower leg, the posterior group of the muscles of the lower leg, the lateral group of the muscles of the lower leg, the muscles of the dorsum of the foot, the muscles of the sole. 14. The lumbar plexus (location and course of the nerves). The sacral plexus (location and course of the nerves) 15. The external iliac artery /segments, branches/, the femoral artery /segments, branches/, the anterior and posterior tibial artery, the arterial arches of the foot, the superficial and deep venous vessels, the lymphatic system. Boundaries and contents of the popliteal fossa, the canal of the medial and lateral malleolus. 16. The skull /the bones of the facial and cerebral cranium, the sites of emergence of the cranial nerves, the boundaries of the cranial fossae, the contents of the foramen magnum, the jugular foramen, the superior and inferior orbital fissure, the orbit, the nasal cavity, the oral cavity/, the temporomandibular joint, the masticatory muscles, the muscles of facial expression. 17. The muscles of the neck /superficial, suprahyoid, infrahyoid, scalene, prevertebral/, the cervical plexus, the common carotid artery, the external and internal carotid artery, the external jugular vein, the lymph nodes, the salivary glands 18. General structure of the brain Palpatory anatomy – 1. Introduction to palpation. The aims of palpatory examination, the techniques, and the grips used. 2. Practical study of the functional anatomy of the muscular and skeletal system with elements of the nervous system, based on the palpatory		

					identification of the structures of the individual elements of the locomotor system, together with graphic mapping of their course on the skin of the examined person. 3. Palpation of the muscles and ligaments within the upper limb and the lower limb. 4. Palpation of the muscles and ligaments within the spine and the head. Fundamentals of imaging methods: radiography. Fundamentals of imaging methods: computed tomography. Fundamentals of imaging methods: ultrasonography. 2. Selected issues in the diagnostics and pathology of the nervous and vascular systems and the soft tissues. Selected issues in the diagnostics and pathology of the thorax, the spine and the head. Selected issues in the diagnostics and pathology of the osteoarticular system, the upper limb and the lower limb. 3. Imaging anatomy of the thorax, the spine and the head. Imaging anatomy of the nervous system, the circulatory system and the soft tissues. Imaging anatomy of the upper limb and the lower limb, the osteoarticular system. Selected pathologies within the spine, the thorax and the head. Selected pathologies of the nervous system, the circulatory system and the soft tissues. Selected pathologies of the osteoarticular system, the upper limb and the lower limb. Classes: Practical analysis of the topics covered		
3.	BIOPHYSICS	W01 – W03	U01	K01, K02	Lectures: 1. Basic issues in the strength of materials (stretching and compression of tissues, stresses, deformations, the content of Hooke's law, torsion and bending, bone fractures, adaptation of the passive locomotor system to the transfer of mechanical loads). 2. Elements of fluid mechanics (biophysics of the circulatory and respiratory systems, parameters of liquid flow). 3. Biophysics of hearing: the sense of hearing, acoustic waves, ultrasound, infrasound, the characteristics of hearing in the human ear, the sound intensity level. 4. Biophysics of vision: selected issues in geometric optics, the optical system of the eye, electromagnetic waves, spatial vision. 5. Biophysics of the respiratory system: the mechanism of pulmonary ventilation.	ZAO	Test, open-ended descriptive questions. Activity in classes. The module ends with a test in the form of a written single-choice test containing 30 questions. Passing requires giving a correct answer to at least 16 questions.

					6. The influence of mechanical factors on the organism: vibrations 7. The influence of the magnetic and electric field on the organism (the electrical properties of the cell, the resistance of the human body, direct current circuits, the work and power of electric current). 8. Ionizing and non-ionizing radiation. 9. The operating principle of the computed tomography scanner and magnetic resonance imaging. 10. The theoretical foundations and practical use of physical and biophysical laws and phenomena and regularities in medical diagnostics, prophylaxis and treatment. The principles of functioning of diagnostic and therapeutic apparatus		
					Classes: The organism as a physical object – thermodynamic description of the organism, physical exertion versus metabolism and energy requirements, the influence of physical phenomena on the organism 2. Fundamentals of fluid mechanics, blood and air flows through the organism, Bernoulli's and Hagen-Poiseuille's laws, vascular resistance 3. The influence of external factors on the human organism, the sense organs. 4. Physical foundations of selected diagnostic and therapeutic methods in medicine, physiotherapy and related disciplines. During the laboratory sessions, students perform measurements related to the application of selected medical imaging or diagnostic methods, as well as system models (respiratory, circulatory), process the data, analyse, interpret and present them in the form of reports prepared during the classes. The full list of exercises will be made available at the beginning of the semester.		
4.	BIOMECHANICS (Applied biomechanics with elements of ergonomics, clinical biomechanics)	W01 – W07	U01 – U04	K01 – K02	Lecture: 1. Introduction to biomechanics, the aims and tasks of biomechanics, the physical foundations of biomechanics. 2. Human metrology, body composition and structure. The passive system of human movement; the basic biomechanical functions of the bony skeleton and its joints. 3. The system of biomechanical levers. Determination of masses and centres of mass for individual parts of the human body	ZAO	Obtaining 51% of correct answers in a single-choice test Activity during classes, submission of correctly completed exercise protocols. Passing the written test.

					4. Determining the centre of gravity using the single-sided lever method. 5. Characteristics of interosseous joints, biokinematic chains. Range of motion in the joints, measurement of mobility, internal (anatomical) and external factors affecting the range of motion. 6. Anatomical and functional organization of skeletal muscles, electromechanical coupling, the mechanism of contraction. 7. Bioelectrical activity of muscles 8. Characteristics of skeletal muscles, classification of skeletal muscles, types of muscle fibres. 9. Sources of energy and metabolism of muscle fibres. 10. Assessment of the mechanical parameters of muscles – a review of the techniques used in physiotherapy. 11. Types of contraction. Topography of human muscle forces. Methodology for studying the values of the moments of muscle group forces under static conditions (dynamometry) 12. Moments of force, topography of moments of force. 13. Sensory and motor innervation of skeletal muscles. 14. Kinaesthesia. Methods of assessing proprioception 15. Biomechanics of the standing posture (the postural control system, methods of assessing postural stability, stabilography). 16. Quantitative characteristics of the human locomotor system (statics and dynamics). Control of the human locomotor system. Classification of human movements. Spinal and central control of motor activities. 17. Motor control. Disorders of motor control, forms of re-education. 18. Ergonomics of the physiotherapist's work, ergonomics of work and of the home. 19. Ergonomic assessment and selection of a workstation for persons with disabilities. 20. Modern directions in the development of biomechanics and medical bioengineering.		
					Classes; 1. Human movement technique (basic forms of movement: walking and running, criteria for assessing movement technique, selected issues in the analysis of pathological gait patterns).		

					2. Ergonomic foundations for examining and planning workstations in selected occupations. 3. Gait examination on a baropodometric platform. 4. Ergonomics and prevention. Elements of kinesiology. 5. Determining the general centre of gravity of a person, studying the values of the moments of muscle group forces under static conditions, analysis of the Hill curve, analysis of human gait (computer simulations, recording and analysis of films), elements of biomechanical modelling, biomechanical analysis of falls, examination and planning of workstations, ergonomic assessment of loads.		
5.	DIAGNOSTICS IN PHYSIOTHERAPY I (Functional diagnostics in dysfunctions of the locomotor system.)	W01 – W03	U01 – U08	K01 – K03	Lectures: 1. The specific nature of the subjective and objective examination in the assessment of the locomotor system. 2. Functional diagnostics of the muscles and joints of the upper limb in selected dysfunctions of the locomotor system. Practical performance of tests, interpretation and recording of results. Assessment of the patient's activity in accordance with the ICF. 3. Functional assessment of the nervous system of the upper limb in selected dysfunctions of the locomotor system. 4. Functional diagnostics of the muscles and joints of the lower limb in selected dysfunctions of the locomotor system. Performance of tests, interpretation and recording of results. Assessment of the patient's activity in accordance with the ICF. 5. Functional assessment of the nervous system of the lower limb in selected dysfunctions of the locomotor system. 6. Functional diagnostics of the muscles and joints of the spine in selected dysfunctions of the locomotor system. Performance of tests, interpretation and recording of results. Assessment of the patient's activity in accordance with the ICF. 7. Functional assessment of the nervous system of the spine in selected dysfunctions of the locomotor system. 8. Global assessment. The influence of myofascial chains on dysfunctions within the locomotor system. 9. Assessment of body posture. Patient's locomotion. 10. Clinical tests and scales used to assess disorders of muscle tone.	EGZ	The arithmetic mean of the grades from the tests Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Observation of the student during classes. The condition for passing the final examination is obtaining a minimum of 51% of the points from the examination test. Points obtained from the other forms of verification, in the form of a bonus, will be taken into account when issuing the final grade

					11. Clinical tests and scales used for the comprehensive assessment of patients with neurological diseases and after neurosurgical procedures. 12. Clinical tests and scales used to assess patients with rheumatic diseases. 13. Documentation of the results obtained. Classes: Practical analysis of the discussed content		
6.	DIAGNOSTICS IN PHYSIOTHERAPY II (Functional diagnosis in internal diseases. Functional diagnostics in the developmental age.)	W01 – W04	U01 – U011	K01 – K03	Lectures: 1. The specific nature of the subjective and objective examination in internal diseases in cardiology, cardiac surgery, pulmonology, geriatrics, surgery, angiology, obstetrics and gynaecology, intensive care, oncology and palliative medicine, psychiatry. 2. Principles for assessing vital signs. 3. Tests of cardiovascular and respiratory system capacity. 4. Practical performance of functional tests and scales used for the comprehensive assessment of patients. 5. Interpretation of results. Assessment of the patient's cognitive-emotional functions and mental state. 6. Functional tests and assessment scales used in the diagnostics of children and adolescents in paediatrics. 7. Principles for assessing physical capacity in children 8. Assessment of the patient's activity in accordance with the ICF. 9. Documentation of the obtained results. The specific nature of taking the medical history of children and adolescents with developmental-age disorders. Developmental tables. Norms of infant development, examination of infants. 2. Methods of assessing psychomotor developmental disorders in infancy. Developmental tests. 3. Functional diagnostics in nervous system diseases in children. 4. Assessment of body posture and disorders within the upper and lower limbs. Diagnostic tests. Gait analysis of children with developmental-age disorders. 5. Clinical tests and scales used to assess muscle tone disorders.	EGZ	Arithmetic mean of the grades from the tests. Examination. The student's independent work during classes (involvement in performing tasks, drawing conclusions, presenting results) Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions. The student's independent work during classes (involvement in performing tasks, drawing conclusions, presenting results). Observation of the student during the classes. The condition for passing the final examination is obtaining a minimum of 51% of the points on the examination test. Points obtained from the remaining forms of verification, in the form of a bonus, will be taken into account when issuing the final grade

					6. Tests and scales for assessing the physical fitness and capacity of children with congenital disability. 7. Tests for assessing sensory integration disorders in preschool and school-age children. 8. Assessment of the patient's activity in accordance with the ICF. 9. Clinical tests and scales used for the comprehensive assessment of patients with neurological diseases. 10. Documentation of the obtained results Classes: Practical analysis of the content presented in the lecture		
7.	Dietetics and Supplementation in Sport	W01, W02	U01, U02	K01, K02	Lectures: General foundations of human nutrition. The importance of nutrients. General characteristics of the basic food components (carbohydrates, protein, fat, vitamins, mineral salts, water). 2. Nutritional norms. 3. The importance of nutrition and supplementation in sport. 4. Characteristics of dietary supplements – of plant origin and as single nutrients. 5. Dietary supplements, classification, nutritional role, safety and effectiveness of use. 6. The ability to indicate the need for and the risks arising from the use of supplements. Classes: 1. Foundations of muscle metabolism. 2. Supplements and nutritional preparations helpful in sport. 3. The significance of body mass and body composition in sport. 4. Means and methods of physical training. 5. Analysis of the diet of athletes. 6. Appropriate selection of sources of knowledge about dietary supplements, conditioned by the state of health and the requirements associated with the exertion undertaken. 7. Sample dietary and supplementation solutions. 8. Sample supplementation regimens for competitors practising various sports.	ZAO	practical tests, test The student's activity and positive attitude during classes. Observation during the classes The credit is the arithmetic mean of the grades from all forms of verification.
8.	DOCUMENTING THE PHYSIOTHERAPY PROCESS	W01, W02	U01, U02	K01, K02	Lectures: Familiarising students with the legal regulations in force concerning physiotherapy documentation 2. Documentation of the physiotherapist's work in accordance with the ICF guidelines, facilitating the	ZAO	Preparation of physiotherapy documentation

					planning of physiotherapy, the selection of appropriate exercises and other treatments as well as the assessment of their effectiveness, providing a picture of the appropriateness of continuing a given type of management in a specific patient, a basis for broader inference regarding treatment methods in various disease entities 3. Problems and their solving related to the planning, conducting and monitoring of the effectiveness of the rehabilitation process 4. Diagnosing motor fitness. Examination of the patient for the purposes of physiotherapy. 5. Subjective examination (medical history). Objective examination. Additional examination		Observation of the student during classes. Ungraded credit on the basis of active participation in the classes and the preparation of physiotherapy documentation.
					Classes: Individual documentation – concerning particular patients receiving health services; a) internal individual documentation – intended for the needs of the entity providing health services; b) external individual documentation – intended for the needs of the patient receiving 2. Collective documentation – concerning the totality of patients or specified groups of patients receiving health services.		
9.	DIDACTICS OF PHYSIOTHERAPY	W01	U01	K01	Lectures: Motor learning; theories of movement learning, phases of motor learning; 2. The functioning of the brain during motor learning; 3. Disorders of the acquisition of motor skills associated with age and disease; 4. Feedback methods. General principles of didactics. 5. Methods, forms and means applied in the teaching of motor skills. 6. Formulating objectives, creating programmes, evaluation in the education process. 7. Modern multimedia techniques used in didactic work. 8. Special education (rewalidacja), the specific nature of the learning of persons with disabilities. 9. Selection of the content and form of conveying knowledge about movement depending on the age and dysfunction of the cognitive functions of the recipient. 10. The physiotherapist's professional toolkit.	ZAO	Credit: preparation of an essay, active participation in the classes, an essay concerning the methods and forms applied in the teaching of motor skills.

10.	HEALTH EDUCATION: PUBLIC HEALTH, DEMOGRAPHY AND EPIDEMIOLOGY	W01 – W04	U01, U02	K01, K02	Lectures: The role of demography and epidemiology in the health sciences. 2. Demographic events. 3. The ageing of society. 4. Basic measures of the state of health used in epidemiology. 5. The cause-and-effect relationship between exposure and disease in epidemiology. 6. Types of epidemiological studies. 7. Epidemiology of non-communicable diseases. 8. The main causes of morbidity and mortality in Poland. 10. Standardisation of coefficients – exercises 11. Ecological study (study design). Screening test (case). 12. Ecological study The development of the practice of actions and research in public health over the centuries. The concept and scope of public health. The subjective and objective scope of Public Health. 2. Research on health inequalities. The development of inequality models (health determinants). 3. Activities of systemic institutions (central authorities, units of local government, non-governmental organizations, healthcare entities and others) for the benefit of population health, with particular emphasis on activities promoting appropriate physical activity (analysis of health programmes, regulations) and rehabilitation. 4. Organization and financing of rehabilitation services (regulatory and institutional analysis	ZAO	A test consisting of 25 questions. The condition for obtaining a positive grade is achieving a minimum of 60% of the total score. The student's own activity during classes
11.	ECONOMICS AND HEALTHCARE SYSTEMS AND MANAGEMENT AND MARKETING - ENG.	W01 -W05	U01 – U03	K01, K02	Lectures: What is a healthcare system? 2. Basic principles of the organization and financing of the healthcare system, including in particular medical rehabilitation services. 3. An entity providing physiotherapy services as an entrepreneur (business plan, operational and strategic management) and as a provider of health services (formal and legal requirements) 4. Systems of payment for health services. 5. Contracting of medical rehabilitation services under a contract with a public payer 6. Principles of the ethics of medical marketing Introduction to the course. 2. Analysis of the macro- and micro-environment 3. Management functions 4. Basic concepts of marketing. Marketing of services, marketing of health services	ZAO	Case study. Prepared by the group – a marketing plan for a selected healthcare facility. Graded credit based on the arithmetic mean of the courses.

					5. The marketing mix for a healthcare organization 6. Segmentation of health services. Positioning of health services on the market 7. The market versus the market for health services. Development of an organization's marketing orientation 8. Marketing strategies of healthcare organizations Classes: Practical analysis of the content presented		
12.	ELEMENTS OF OCCUPATIONAL THERAPY	W01, W02	U01, U02	K01	Lectures: 1. Occupational therapy: aims, types, methods, therapy of children and adults – similarities and differences. 2. Work therapy – a historical outline, the activity of Dr P. Pinel, schools for occupational therapists, the specificity of therapy in orthopaedic, rheumatological, psychiatric, trauma and chronic-care wards. 3. Aims and tasks of work therapy; compensation of deficits, correction, functional improvement, stimulation. Occupational therapy as preparation for professional work. 4. Teaching life through life; centres of interest, work centres, methods. 5. Methods of occupational therapy: creative rehabilitation, creative activities, positive psychotherapy, touch therapy, creative therapy; music, psychodrama /pedagogical theatre/, dance, bibliotherapy, art therapy. 6. Types of therapeutic activities; C. D. Rogers's therapy, discharging, recreational, relational, interpretive, environmental, relieving, activating, contact, relaxation-concentration therapy, individual therapy, group therapy, therapy of parents and the family. 7. Familiarizing the student with the specificity of work in special educational centres as well as in treatment facilities and occupational therapy facilities. 8. Familiarizing the student with the organizational structure and environment of occupational therapy facilities, 9. Legal foundations for the functioning of occupational therapy workshops. 10. Principles for qualifying patients to participate in occupational therapy workshops – required	ZAO	A presentation on a given therapeutic topic.

					documents, the period of the patient's stay in the facility. 11. The role of the therapeutic team, organization and methods of work; assessment of the progress of functional improvement, patient observation sheets Classes: Presenting therapeutic tasks vs. the lecture subject matter		
13.	ERGONOMICS AND OCCUPATIONAL HEALTH AND SAFETY (BHP) IN THE PHYSIOTHERAPIST'S PHYSIOTHERAPY	W01 – W03	U01 – U03	K01	Lectures: Ergonomics of the physiotherapist's work. Ergonomics of work with children and the elderly. 2. The most frequently made errors in the physiotherapist's work 3. Consequences of working in non-ergonomic conditions – overload syndromes of the locomotor system versus the specificity of the activities performed 4. Occupational hygiene of the physiotherapist. 5. Ergonomics in the service of patients moving in a wheelchair 6. Topic: Ergonomics for the needs of people with rheumatic diseases 7. Ergonomics of the work of medical environments 8. Ergonomics in the service of patients with neurological diseases, orthopaedic conditions and traumatic injuries of the locomotor system 9. Ergonomics for people with disabilities 10. Ergonomics in the service of chronically immobilized patients 11. Occupational diseases in the physiotherapist's work Classes: Analysis of presentations on the given topics of the lecture content	ZAO	A presentation on a given therapeutic/problem topic
14.	PHARMACOLOGY IN PHYSIOTHERAPY	W01, W02	U01	K01	Lectures: Fundamentals of general pharmacology – forms and routes of drug administration, mechanisms of action, adverse effects, general principles of drug use, dosing, pharmacotherapy of children and the elderly, interactions between drugs. 2. Non-narcotic analgesics 3. Opioid analgesics 4. Skeletal muscle relaxants 5. Local anaesthetics 6. Fundamentals of antibiotic therapy	ZAO	The final grade (graded credit) for the module is the average taking into account the formative grades from: assessment test 1 (the test contains questions covering course A); assessment test 2 (the test contains questions covering course B) and takes into account activity during classes.

					7. Drugs used in respiratory system diseases 8. Drugs used in haemostasis disorders 9. Selected hormonal drugs 10. Drugs used in iontophoresis and phonophoresis Classes: Forms of drugs and their bioavailability; 2. Principles of taking drugs, 3. Therapeutic index, the dependence of a drug's action on its dose, 4. Principles of drug dosing in children and the elderly; pharmacokinetic parameters characterizing drug absorption, 5. Groups of drugs used in physiotherapeutic management; 6. Analgesic, anti-inflammatory and anti-oedema agents, local anaesthetic agents, 7. Inhalation agents, agents applied locally during massage: ointments, creams, gel. 8. The effect of locally administered drugs on the systemic response. 9. Interactions between the drugs taken and the procedures applied 10. Side effects of drugs that have an impact on physiotherapy.		
15.	PHYSIOLOGY (general physiology, physiology of physical exercise, physiology of pain, physiological diagnostics)	W01 – W07	U01 – U06	K01, K02	Lectures: 1. The structure and functions of the cell. Homeostasis. 2. Fundamentals of cell electrophysiology. 3. Muscles, types, structure and characteristics, physiology of muscle contraction. Physiology of the kidneys: 4. Physiology of the digestive system 5. Physiology of the endocrine system: characteristics of the endocrine system 6. Physiology of blood: 7. Physiology of blood: Haemostasis. Blood coagulation indices. Coagulogram. Markers of the inflammatory state 8. Physiology of muscles: Types of muscle tissue – observation under the microscope. Single contraction, tetanic contraction, isotonic and isometric contraction curves, muscle fatigue – SimMuscle computer program. Physiology of the digestive system: Calculating the basal and total metabolic rate. Diagnostic techniques – endoscopic examinations of the gastrointestinal tract, tests detecting Helicobacter pylori. Physiology of the endocrine system: Selected diagnostic methods used for determining hormone levels in the blood (ELISA test, radioimmunoassay). Regulation of	ZAO	theoretical tests, observation of the student's work, project The final grade is the arithmetic mean of the grades from all courses. Points obtained during classes in the form of a bonus will be taken into account when awarding the final grade.

					blood glucose levels. Measurement of glucose concentration. OGTT test. 9. Physiology of the reproductive system: the menstrual cycle, the physiology of puberty and menopause, the physiology of pregnancy, childbirth and lactation. 10. Physiology of the excretory system. General Physiology – Laboratory tests and their significance for the needs of physiotherapy 2. Basic concepts in the field of exercise physiology. 3. Sources of energy during physical exercise. 4. Classification of physical exertion. The significance of physical activity in human life. 5. Factors affecting physical capacity. Methods of assessing physical capacity. 6. Indications and contraindications for the use of exercise tests 7. Maximal oxygen uptake – measurement and prediction. Assessment of anaerobic capacity – the Wingate test. 8. Energy expenditure – estimated assessment and measurement of energy expenditure during work. Ergospirometry – determining the anaerobic threshold. 9. The functioning of thermoregulatory mechanisms at rest and during physical exercise under various physical environmental conditions. 10. The physiological mechanisms and effects of sports training. Sleep and the athlete's performance. Adaptation of the circulatory system to physical exercise. 11. The mechanism of the functional increase in blood flow in striated muscles. Changes in the functioning of the circulatory system as a result of endurance and strength training. Adaptation of the respiratory system to physical exercise. 12. The course of ventilation during sub-threshold and supra-threshold exertion. 13. The mechanism of the exercise-induced increase in ventilation. The mechanism of the development of hypoxia as a result of intense physical exercise 14. Methods of recording training loads on the basis of ready-made protocols and questionnaires. Neurophysiology: The division of the nervous system. The blood-brain barrier, the glia and its functions. Cerebrospinal fluid.		

					2. The spinal cord; structure, organization, spinal reflexes. Regulation of muscle tone. 3. The lower motor neuron. The motor axis: the pyramidal system, the basal ganglia of the brain, the cerebellum. The sensory axis: receptors, conduction and perception. 4. Pain and its perception. Brain activation: the reticular system, EEG, sleep and wakefulness. The hypothalamus, the limbic system, higher nervous functions. 5. Physiology of the heart: cardiac electrophysiology, ECG, the cardiac cycle, regulation of cardiac function, heart sounds, contractility of the cardiac muscle. 6. The vascular system: the physiology of the aorta, arterial blood pressure and the arterial pulse, microcirculation, arterial resistance and autoregulation of tissue blood flow, regulation of arterial pressure, coronary circulation. Physiology of the respiratory system: the physiology of the airways, ventilation and the mechanics of breathing, spirometry, pulmonary circulation, diffusion and transport of respiratory gases, regulation of breathing. 7. Neurophysiology: Electrical properties of neurons: the action potential, the concept of excitability, the refractory period. Eliciting an action potential in the sciatic nerve at various stimulus strengths – SimNerve computer program. 8. Examination of tendon reflexes. Examination of the plantar reflex. 9. Examination of ocular reflexes. Examination of vestibulospinal reflexes: the Romberg test, the gait test, the Barany experiment. Examination of the neurological functions of the motor system – examination of gait, balance (the Romberg test), muscle strength and tone, examination of movement coordination. 10. Examination of the neurological functions of the sensory system – examination of the sense of touch, vibration, pain, temperature and discriminative sensation. Examination of the organ of hearing – checking auditory sensitivity, the Weber experiment, the Rinne experiment. 11. Examination of the organ of sight – examination of visual acuity, colour vision, visual contrast according to Hering, colour contrast, the Mariotte experiment.		

					12. Examination of selected cranial nerves. Analysis of the EEG recording. Imaging examinations of the nervous system: CT and MRI. Higher nervous functions – examination of speech and memory. 13. Physiology of the heart: ECG – performance, description and analysis. Auscultation of heart sounds. The tropic action of adrenaline and ACh, the action of α- and β-adrenergic receptor blockers and calcium channel blockers – SimHeart computer program. Physiology of the vascular system: Measurement of arterial blood pressure by the auscultatory method. Examination of the pulse by the palpation method. 14. The Crampton and Martinet orthostatic tests. Orthostatic hypotension. Physiology of physical exercise: 15. Calculating the stroke volume and the cardiac output of the heart and determining the effect of physical exercise on these parameters. 16. The kinetics of changes in circulatory system parameters induced by physical exercise. Functional tests in the assessment of the efficiency of the circulatory system: the Ruffier test, the Harvard step test, breath-holding time at rest and during exercise. 17. Physiology of the respiratory system: The mechanics of breathing; changes in the circumference of the chest during breathing, determining the type of breathing pattern. 18. Physical examination of the respiratory system. Functional examination of the respiratory system: resting spirometry, the flow/volume curve, MVV. Measurement of the vital capacity of the lungs. Basic literature (selected chapters): 1. Wordliczek J. (ed.), Leczenie bólu, Wydaw. Lekarskie PZWL, Warsaw 2012. 2. Hueter-Becker A., Doelken M. (Polish edition ed.: Szczegielniak J.), Badanie kliniczne w fizjoterapii, Edra Urban & Partner, Wrocław 2018, 3. Ronikier A.: Diagnostyka funkcjonalna w fizjoterapii, PZWL 2019 (print edition, ebook) 4. Silverthorn D.U.: Fizjologia człowieka zintegrowane podejście, PZWL 2018 (print edition, ebook) Supplementary literature (selected chapters): 1. Lewko A., Pyszora A., Badanie fizjoterapeutyczne pacjenta z dysfunkcją układu		

					oddechowego, Krajowa Izba Fizjoterapeutów, Warsaw 2020. 2. Odrowąż-Sypniewska, Grażyna. Ed., Diagnostyka laboratoryjna wybranych chorób reumatycznych, MedPharm Polska, 2011. 3. Jodzio, Krzysztof, Diagnostyka neuropsychologiczna w praktyce klinicznej, Difin, 2011. 19. Measurement of peak expiratory flow (PEF) with a peak flow meter. Measurement of arterial blood saturation using a pulse oximeter Classes: analogously – solving problem situations in the field of physiology		
16.	PHYSIOPROPHYLAXIS AND HEALTH PROMOTION	W01, W02	U01 – U03	K01	Lectures: The concept of physioprophylaxis. Characteristics, tasks, types 2. Health as a basic concept in health education. 3. The role and competences of persons conducting health education. 4. Methods of health promotion. Preventive programmes in Poland and worldwide, their effectiveness. 5. The health and social determinants of diseases. Factors determining health, actions shaping health. 6. The contribution of health promotion to achieving health objectives. 7. Methodology of health teaching. Forms, methods and means in health education. 8. The scope and nature of physiotherapy tasks in disease prevention and health promotion. 9. Civilization diseases in the context of the physiotherapist's work. 10. Physioprophylaxis in sport. 11. Healthy ageing as an element of health promotion and education. The role of the physiotherapist. 12. Motivational interviewing as a method of health promotion. 13. Education towards becoming an active patient. Classes: Defining health versus health promotion. The essence of the concepts: health behaviours, lifestyle, health promotion, health education, the individual's vital potential, prevention 2. Physical activity at different ages. 3. Preparation for sports activity. 4. Identifying risk factors for diseases resulting from lifestyle.	ZAO	Development of a physioprophylactic project/programme assessment of the student's participation in classes, activity

					5. Principles of designing physiotherapy programmes. 6. Presentation of sample physioprophylactic programmes.		
17.	GENERAL PHYSIOTHERAPY	W01 – W04	U01	K01, K02	Lectures: The beginnings of physiotherapy and motor rehabilitation, the Polish School of Rehabilitation. 2. Physical fitness and capacity. The effect of movement on the human body. The effect of reduced motor activity on the human body. 3. Disability and rehabilitation – historical outline, terminology, models. Hypokinesia and motor activity 4. Pathophysiology of the locomotor system. 5. Basic concepts in the field of physiotherapy. 6. General principles of physiotherapy. 7. Means of physiotherapy. 8. The objectives of physiotherapy. The phenomena of compensation, regeneration and adaptation and their use in physiotherapy. 9. An overview of physiotherapeutic methods. 10. General indications and contraindications for kinesiotherapy, physical therapy and massage. 11. The effect of physical factors on the human body. 12. Hospital, outpatient and home physiotherapy. 13. The rehabilitation team. 14. Documentation in physiotherapy. 15. Sport for people with disabilities. 16. The Act on the profession of physiotherapist. 17. The interdisciplinary nature of physiotherapy Classes: The examination and its components. Methods of examining the locomotor system – static examination and dynamic examination, general and local. 2. Terminology of movements. Axes and planes of movement. 3. Body posture, correct posture, methods of assessment. 4. Selected functional tests. Additional examinations. 5. Systematics of exercises in kinesiotherapy. 6. Types of physical treatments and massage. 7. The basis for the objectives of physiotherapy	ZAO	activity in classes, practical credit written examination (test) covering the subject matter of the classes (lectures and classes) observation
18.	PHYSIOTHERAPY IN SURGERY (Clinical foundations of physiotherapy in surgery.	W01 – W06	U01 – U08	K01 – K03	Lectures: Epidemiology of internal diseases in surgery, thoracic surgery and vascular surgery, including endocrinological disorders and metabolic disturbances.	ZAO	The arithmetic mean of the grades from the tests

	Physiotherapy in internal diseases in surgery.)				2. Characteristics of disease entities, their aetiology and course. 3. The clinical and morphological picture. 4. Principles and methods of conservative and surgical treatment. 5. Principles of patient diagnosis, with particular emphasis on physiotherapy. 6. Qualification of patients for physiotherapy. 7. The place and role of physiotherapy in the process of treating and rehabilitating patients with internal diseases. 8. Principles and elements of applied physiotherapy. Characteristics of physiotherapy in surgery and its objectives. 2. Functional disorders occurring as a result of diseases of the internal organs and systems, in particular in surgery, thoracic surgery and vascular surgery, including endocrinological disorders and metabolic disturbances. 3. Their consequences for the functioning and activity of patients. 4. The impact of complications during treatment on the course of the physiotherapy provided. The significance and interpretation of laboratory tests in planning physiotherapy. 5. Principles of subjective and objective physiotherapeutic examination, and of functional assessment in accordance with the principles of the ICF. 6. Selection of types of physiotherapeutic interventions taking into account indications and contraindications as well as the patient's state of health and the stage of the course of the disease, conservative and surgical treatment. 7. The stages of physiotherapy and their characteristics. 8. Errors and complications in the course of the physiotherapy process. 9. Monitoring of the course of the physiotherapy process and of its effectiveness. Classes: Practical case analysis – clinical work		Test examination. Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Observation of the student during classes
19.	PHYSIOTHERAPY IN GERIATRICS (Clinical foundations of physiotherapy in geriatrics.	W01 – W07	U01 – U10	K01 – K03	Lectures: Basic concepts and definitions in geriatrics and gerontology. 2. Theories and models of the ageing process. 3. The course of the ageing process of the human body and its effect on systems and organs.	ZAO	Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results)

	Physiotherapy in internal diseases in geriatrics)				4. The specifics of psychomotor changes in older people. 5. Characteristics of the main diseases occurring in geriatric age, their symptoms and course. 6. Forms of conservative and surgical treatment of geriatric patients. 7. Problems in the treatment process of geriatric patients. 8. The effects of hypokinesia in geriatric patients. Major geriatric problems – prevention and treatment. 9. Comprehensive geriatric assessment, the tasks of team members. Characteristics of physiotherapy applied in geriatric patients and its objectives. 2. The importance of physical activity in the ageing process. 3. Functional disorders occurring in older people as a result of the ageing process. 4. Their consequences for the functioning and activity of patients. 5. The influence of complications in the course of treatment of older people on the physiotherapy process being conducted. 6. The principles of the subjective and objective physiotherapeutic examination and of functional assessment in accordance with the assumptions of the ICF. 7. Comprehensive geriatric assessment – the tasks of the physiotherapist. 8. Selection of types of physiotherapeutic interventions taking into account the indications and contraindications as well as the patient's state of health, the stage of the course of the disease, and conservative and surgical treatment. 9. The stages of physiotherapy and their characteristics. 10. Errors and complications in the course of the physiotherapy process. 11. Monitoring the course of the physiotherapy process and its effectiveness. The specifics of working with a geriatric patient. Classes: Practical case analysis – clinical work		Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Observation of the student during classes
					Lectures: Physiology and characteristics of the woman's menstrual cycle.		

20.	PHYSIOTHERAPY IN GYNAECOLOGY AND OBSTETRICS (Clinical foundations of physiotherapy in gynaecology and obstetrics. Physiotherapy in internal diseases in gynaecology and obstetrics)	WE01 – W06	U01 – U08	K01 – K03	2. The course of pregnancy, childbirth and the puerperium. 3. Characteristics of disease entities, their aetiology and course. 4. Clinical and morphological picture. 5. Principles and methods of conservative and surgical treatment. 6. Qualification of patients for physiotherapy. 7. The place and role of physiotherapy in the process of treatment and rehabilitation of patients in gynaecology and obstetrics. 8. Principles and elements of applied physiotherapy. Characteristics of physiotherapy applied in gynaecology and obstetrics and its objectives. 2. Functional disorders occurring in gynaecology and obstetrics. 3. Their consequences for the functioning and activity of patients. The influence of complications in the course of treatment on the physiotherapy process being conducted. 4. The principles of the subjective and objective physiotherapeutic examination and of functional assessment in accordance with the assumptions of the ICF. 5. The principles of planning and the process of physiotherapeutic management. 6. Selection of types of physiotherapeutic interventions taking into account indications and contraindications as well as the patient's state of health and the stage of the course of the disease, conservative and surgical treatment. 7. The stages of physiotherapy and their characteristics. 8. Errors and complications in the course of the physiotherapy process. 9. The application of physiotherapy during pregnancy and the puerperium. 10. Antenatal classes. 11. Monitoring the course of the physiotherapy process and its effectiveness Classes: Practical case analysis – clinical work		Arithmetic mean of grades from tests. Graded credit Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Observation of the student during classes
21.	PHYSIOTHERAPY IN INTENSIVE CARE, ONCOLOGY AND PALLIATIVE MEDICINE (Clinical foundations of physiotherapy in intensive care. Clinical foundations of	W01 – W07	U01 – U09	K01 – K03	Lectures: Organization and the specifics of work in intensive care units. 2. Life-threatening conditions, monitoring of critically ill patients, vascular access. 3. Principles of qualifying patients for treatment in intensive care units.	ZAO	Arithmetic mean of grades from tests. Graded credit Independent work of the student during classes (engagement in performing

	physiotherapy in oncology and palliative medicine. Physiotherapy in internal diseases in oncology and palliative medicine)				4. Characteristics of patients, their conditions and injuries qualified for treatment in the intensive care unit. Methods of treating patients staying in the ICU. 5. The role and significance of physiotherapy. 6. Characteristics of physiotherapy applied in patients in ICU units and its objectives. The functional disorders occurring, their consequences for the functioning and activity of patients. 7. The specifics of working with an unconscious patient The influence of complications in the course of treatment on the physiotherapy process being conducted. 9. The principles of the subjective and objective physiotherapeutic examination and of functional assessment in accordance with the principles of the ICF. 10. Selection of types of physiotherapeutic interventions taking into account the indications and contraindications as well as the patient's state of health. 11. The stages of physiotherapy and their characteristics. 12. Errors and complications in the course of the physiotherapy process. 13. Monitoring the course of the physiotherapy process and its effectiveness. Definition, principles and characteristics of specialist palliative care. 2. Communication with a patient diagnosed with a neoplastic disease and in a terminal state. 3. Pain as a component of suffering and as a symptom in neoplastic disease. 4. Characteristics of the disease entities occurring in oncology, their aetiology and course. 5. Clinical and morphological picture. Principles and methods of conservative and surgical treatment. Principles and methods of diagnostics in oncology, with particular emphasis on physiotherapy. 6. The influence of oncological treatment on the patient's condition. 7. The role of physiotherapy in the management of oncological patients and in palliative medicine. 8. Physiotherapeutic management in patients after radiotherapy and in patients treated systemically.		tasks, drawing conclusions, presentation of results) Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Observation of the student during classes

					Characteristics of physiotherapy applied in oncological patients and in palliative states and its objectives. 2. The functional disorders occurring as a result of oncological diseases, their consequences for the functioning and activity of patients. 3. The influence of complications in the course of treatment on the physiotherapy process being conducted. 4. The principles of the subjective and objective physiotherapeutic examination and of functional assessment in accordance with the principles of the ICF. 5. Selection of types of physiotherapeutic interventions taking into account the indications and contraindications as well as the patient's state of health, the stage of the course of the disease, and conservative and surgical treatment. 6. The stages of the physiotherapy applied and their characteristics. 7. Errors and complications in the course of the physiotherapy process. 8. Medical devices used in oncological patients. 9. Monitoring of the course of the physiotherapy process and of its effectiveness. Classes: Practical case analysis – clinical work		
22.	PHYSIOTHERAPY IN CARDIOLOGY AND CARDIAC SURGERY (Clinical foundations of physiotherapy in cardiology and cardiac surgery. Clinical physiotherapy in internal diseases in cardiology and cardiac surgery)	W01 – W09	U01 – U012	K01 – K03	Lectures: Epidemiology of cardiovascular diseases. 2. Characteristics of the disease entities occurring in cardiology, their aetiology and course. 3. The clinical and morphological picture. 4. Principles and methods of conservative and surgical treatment. 5. Principles of diagnostics of the cardiovascular system, with particular emphasis on physiotherapy. 6. Qualification of patients for comprehensive cardiac rehabilitation programmes. 7. The place and role of physiotherapy in the process of treating and rehabilitating patients in cardiology and cardiac surgery. 8. Principles and elements of physiotherapy applied in cardiological and cardiac surgical diseases. Characteristics of physiotherapy applied in cardiological and cardiac surgical patients and its objectives.	ZAO	Arithmetic mean of grades from tests. Graded credit Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results)

					2. Functional disorders occurring as a result of cardiological diseases and following cardiac surgical procedures. 3. Consequences of cardiovascular diseases for the functioning and activity of patients. 4. The influence of cardiovascular complications during treatment on the course of the physiotherapy process. 5. Principles of the subjective and objective physiotherapeutic examination, functional tests and functional assessment in accordance with the principles of the ICF. 6. Selection of types of physiotherapeutic interventions taking into account indications and contraindications as well as the patient's state of health and the stage of the course of the disease, conservative and surgical treatment. 7. The stages of physiotherapy and their characteristics. 8. Errors and complications in the course of the physiotherapy process. 9. Monitoring of the course of the physiotherapy process and of its effectiveness. Classes: Practical case analysis – clinical work		Observation of the student during classes
23.	PHYSIOTHERAPY IN SPORTS MEDICINE (Clinical foundations of physiotherapy in sports medicine. Clinical physiotherapy in dysfunctions of the locomotor system in sports medicine)	W01 – W06	U01 – U08	K01 – K03	Lectures: 1. Characteristics of disease entities, injuries and traumas occurring in sports medicine. 2. Aetiology and course of diseases and injuries occurring in sports medicine. 3. Anorexia nervosa, bulimia and dysmorphophobia in relation to sport. 4. Overtraining syndrome and chronic fatigue syndrome. 5. Principles and methods of surgical and non-surgical treatment, possibilities for rehabilitation. 6. Modern possibilities for the treatment and rehabilitation of athletes. 7. Types of orthopaedic supplies. 8. The place and role of physiotherapy in the treatment process in sports medicine. 9. Principles and elements of physiotherapy applied in diseases and injuries in sports medicine. Classes: Practical case analysis – clinical work		Arithmetic mean of grades from tests. Graded credit Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Observation of the student during classes
					Lectures:		

24.	PHYSIOTHERAPY IN NEUROLOGY AND NEUROSURGERY (Clinical foundations of physiotherapy in neurology and neurosurgery. Clinical physiotherapy in dysfunctions of the locomotor system in neurology and neurosurgery)	W01 – W07	U01 – U12	K01 – K03	Epidemiology of neurological diseases. 2. Characteristics of disease entities occurring in neurology and neurosurgery and their aetiology. 3. The clinical and morphological picture. 4. Principles and methods of conservative and surgical treatment in neurology and neurosurgery. 5. Principles of comprehensive rehabilitation of neurological patients. 6. Types of orthopaedic supplies used in neurological and neurosurgical patients. 7. The place and role of physiotherapy in the process of treating and rehabilitating neurological and neurosurgical patients. 1. Characteristics of physiotherapy applied in neurology and neurosurgery and its objectives. 2. Functional disorders occurring as a result of neurological diseases and following neurosurgical procedures. 3. Consequences of neurological diseases for the functioning and activity of patients. 4. The influence of complications on the course of the physiotherapy process. 5. The application and selection of orthopaedic supplies in the course of neurological diseases and following neurosurgical procedures. 6. Principles of the subjective and objective physiotherapeutic examination and functional assessment in accordance with the principles of the ICF. 7. Selection of types of physiotherapeutic interventions, taking into account indications and contraindications as well as the patient's state of health and the stage of the course of the disease, conservative treatment and surgical treatment. 8. Stages of physiotherapy and their characteristics. 9. Errors and complications in the course of the physiotherapy process. 10. Monitoring of the course of the physiotherapy process and its effectiveness. Classes: Practical case analysis – clinical work	ZAO	Arithmetic mean of grades from tests. Graded credit Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Observation of the student during classes.
25.	PHYSIOTHERAPY IN ORTHOPAEDICS AND TRAUMATOLOGY (Clinical foundations of physiotherapy in orthopaedics and traumatology. Clinical physiotherapy in	W01 – W07	U01 – U09	K01 – K03	Lectures: Characteristics and definitions of injuries, traumas and dysfunctions of diseases in orthopaedics and traumatology. 2. Aetiology, characteristics and course of diseases and injuries of the musculoskeletal system. 3. Non-traumatic diseases of the upper and lower limbs and the spine, disorders of body statics,	ZAO	Arithmetic mean of grades from tests. Graded credit Independent work of the student during classes (engagement in performing

	dysfunctions of the locomotor system in orthopaedics and traumatology.)				congenital defects of the spine, chest and upper and lower limbs. Aseptic bone necrosis. 4. Inflammatory processes of bones and joints. 5. Pathophysiology of inflammation. 6. Degenerative changes within the locomotor system. Functional disorders, clinical and radiological symptoms. Prevention of degenerative disease, indications for rehabilitative and pain-relieving treatment. 7. Bacterial inflammation of bones and joints. 8. Principles and methods of surgical and non-surgical treatment, possibilities for rehabilitation. 9. Limitations of non-surgical methods. 10. Complications of treatment, among others thromboembolic disease, dislocations and loosening of prostheses. 11. Neoplastic diseases of bones and joints. 12. Main disease problems: weakening of bones, pathological fractures, pain, metabolic disorders. 13. Principles of diagnosing bone neoplasms. 14. Differences in the mechanism of injury in young and elderly people (high- and low-energy injuries). 15. Risks associated with fractures in elderly people: cardiorespiratory disorders, pressure ulcers, mental disorders. Modern treatment possibilities. Amputations – causes and types. Principles of prosthetics. 16. Types of orthopaedic supplies. The place and role of physiotherapy in the treatment process in orthopaedics and traumatology. 18. Principles and elements of physiotherapy applied in diseases and injuries in orthopaedics and traumatology. Classes: Characteristics of physiotherapy applied in orthopaedics and traumatology and its objectives. 2. Characteristics of the patient's functional disorders as a consequence of diseases and injuries occurring in orthopaedics and traumatology. 3. Consequences for the functioning and activity of patients following conservative and surgical treatment. 4. The influence of complications on the course of the physiotherapy process. The application and selection of orthopaedic supplies in the course of orthopaedic diseases and injuries.		tasks, drawing conclusions, presentation of results) Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Observation of the student during classes

					5. Principles of the subjective and objective physiotherapeutic examination and functional assessment in accordance with the principles of the ICF. 6. Principles of planning, the process of physiotherapeutic management. 7. Selection of types of physiotherapeutic interventions, taking into account indications and contraindications as well as the patient's state of health and the stage of the course of the disease, conservative treatment and surgical treatment. 8. Stages of physiotherapy and their characteristics. 9. Errors and complications in the course of the physiotherapy process. 10. Monitoring of the course of the physiotherapy process and its effectiveness.		
26.	PHYSIOTHERAPY IN PAEDIATRICS AND PAEDIATRIC NEUROLOGY (Clinical foundations of physiotherapy in paediatrics. Clinical foundations of physiotherapy in paediatric neurology. Clinical physiotherapy in dysfunctions of the locomotor system in the developmental age. Physiotherapy in internal diseases in paediatrics.)	W01 – W05	U01 – U09	K01 – K03	Lectures: Normal psychomotor development of children, stages of development. 2. Characteristics of disease entities occurring in paediatrics and their aetiology. 3. The clinical and morphological picture of diseases of the respiratory, circulatory, digestive and endocrine systems and of the locomotor system. 4. Rheumatic, systemic, neoplastic and infectious diseases. 5. Principles and methods of treating children and adolescents. 6. Diagnostics for the needs of rehabilitation and physiotherapy. 7. The place and role of physiotherapy in the process of treating and rehabilitating patients in paediatrics. The specific nature of working with children. 2. The role of the nervous system in the development of children. 3. The consequences of congenital and acquired brain damage for the development of children. 4. Chronic neurological diseases of the developmental age – diagnosis, clinical symptoms. 5. Diseases of the central and peripheral nervous system. 6. Neuromuscular diseases in children and adolescents. Diagnostics for the purposes of physiotherapy. 7. Prognosis and rehabilitation planning.	ZAO	Arithmetic mean of grades from tests. Graded credit Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Observation of the student during classes

					8. The relationship between clinical symptoms and the level of disability of children depending on the level of spinal cord injury. 9. Principles of comprehensive rehabilitation of neurological patients in paediatrics. 10. Types of orthopaedic supplies used in patients. The specific character of working with children and adolescents. 2. The characteristics of physiotherapy applied in internal diseases in paediatrics and its objectives. 3. Functional disorders occurring as a result of diseases of the locomotor, respiratory, circulatory, digestive, urinary and endocrine systems, as well as metabolic, infectious, rheumatic, systemic connective tissue and haemato-oncological diseases. 4. The consequences of diseases for the functioning and activity of patients. 5. The influence of complications on the course of the physiotherapy provided. Principles of the subjective and objective physiotherapeutic examination and of functional assessment in accordance with the principles of the ICF. 6. Selection of types of physiotherapeutic interventions taking into account indications and contraindications as well as the patient's state of health and the stage of the course of the disease, conservative and surgical treatment. 7. The stages of physiotherapy and their characteristics. 8. Errors and complications in the course of the physiotherapy process. 9. Monitoring the course of the physiotherapy process and its effectiveness Motor development of the child. 2. The characteristics of physiotherapy applied in dysfunctions of the locomotor system in the developmental age and its objectives. 3. Functional disorders occurring in the locomotor system as a result of diseases in the developmental age. The consequences of diseases for the functioning and activity of patients. 4. The influence of complications on the course of the physiotherapy provided. The application and selection of orthopaedic supplies in dysfunctions of the locomotor system. 5. Principles of the subjective and objective physiotherapeutic examination of children and adolescents and of		

					functional assessment in accordance with the principles of the ICF. 6. Selection of types of physiotherapeutic interventions taking into account indications and contraindications as well as the patient's state of health and the stage of the course of the disease, conservative and surgical treatment. 7. The stages of physiotherapy and their characteristics. 8. Errors and complications in the course of the physiotherapy process. 9. Monitoring of the course of the physiotherapy process and of its effectiveness. Classes: Case analysis – practical work with the patient in clinical conditions		
27.	PHYSIOTHERAPY IN PSYCHIATRY (Clinical foundations of physiotherapy in psychiatry. Physiotherapy in internal diseases in psychiatry)	W01 – W06	U01 – U06	K01 – K03	Lectures: The characteristics of disease entities, their aetiology and course in psychiatry. 2. Clinical picture. 3. Principles and methods of treatment and management of patients in psychiatry. 4. Qualification of patients for rehabilitation and physiotherapy. 5. The place and role of physiotherapy in the process of treating and improving the functioning of patients. The characteristics of physiotherapy applicable in psychiatry and its objectives. 2. Functional disorders in patients in psychiatry. 3. Their consequences for the functioning and activity of patients. 4. Principles of the subjective and objective physiotherapeutic examination and of functional assessment in accordance with the assumptions of the ICF. 5. The selection of types of physiotherapeutic interventions taking into account indications and contraindications as well as the patient's state of health and the stage of the course of the disease. 6. The stages of physiotherapy and their characteristics. 7. Errors and complications in the course of the physiotherapy process. 8. Monitoring the course of the physiotherapy process and its effectiveness. 9. The characteristics of physiotherapy applicable in psychiatry and its objectives. 10. Functional disorders in patients in psychiatry. 11. Their consequences for the functioning and activity of patients. 12. Principles of the subjective	ZAO	Arithmetic mean of grades from tests. Graded credit Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Observation of the student during classes

					and objective physiotherapeutic examination and of functional assessment in accordance with the assumptions of the ICF. The selection of types of physiotherapeutic interventions taking into account indications and contraindications as well as the patient's state of health and the stage of the course of the disease. 14. The stages of physiotherapy and their characteristics. 15. Errors and complications in the course of the physiotherapy process. 16. Monitoring the course of the physiotherapy process and its effectiveness. Classes: Case analysis – practical work with the patient in clinical conditions		
28.	PHYSIOTHERAPY IN PULMONOLOGY (Clinical foundations of physiotherapy in pulmonology. Physiotherapy in internal diseases in pulmonology)	W01 – W08	U01 – U09	K01 – K03	Lectures; Epidemiology of diseases of the respiratory system. 2. The characteristics of disease entities occurring in pulmonology, their aetiology and course. 3. The clinical and morphological picture. 4. Principles and methods of conservative and surgical treatment. 5. Principles of diagnostics of the respiratory system, with particular emphasis on physiotherapy. 6. Qualification of patients for pulmonary rehabilitation programmes. 7. The place and role of physiotherapy in the process of treating and improving the functioning of patients in pulmonology. 8. Principles and elements of physiotherapy applied in pulmonological diseases. 1. The characteristics of physiotherapy applied in pulmonological diseases and its objectives. Functional disorders occurring as a result of pulmonological diseases and their consequences for the functioning and activity of patients.	ZAO	Arithmetic mean of grades from tests. Graded credit Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results)

					3. The influence of pulmonological complications during treatment on the course of the physiotherapy provided. 4. Principles of the subjective and objective physiotherapeutic examination, functional tests and functional assessment in accordance with the ICF. 5. Selection of types of physiotherapeutic interventions taking into account the indications and contraindications as well as the patient's state of health, the stage of the course of the disease, and conservative and surgical treatment. 6. The stages of physiotherapy and their characteristics. 7. Errors and complications in the course of the physiotherapy process. 8. Monitoring the course of the physiotherapy process and its effectiveness. Classes: Case analysis – practical work with the patient in clinical conditions		Observation of the student during classes
29.	PHYSIOTHERAPY IN RHEUMATOLOGY (Clinical foundations of physiotherapy in rheumatology. Clinical Physiotherapy in dysfunctions of the locomotor system in rheumatology)	W01 – W05	U01 – U11	K01 – K03	Lectures: Epidemiology of rheumatoid diseases. 2. The characteristics of disease entities occurring in rheumatology and their aetiology. 3. The clinical and morphological picture. 4. Principles and methods of conservative and surgical treatment. 5. Principles of comprehensive rehabilitation of patients with rheumatoid diseases. 6. Types of orthopaedic supplies used in patients. 7. The place and role of physiotherapy in the process of treating and improving the functioning of patients in rheumatology. 8. Principles and elements of physiotherapy applied in rheumatoid diseases. The characteristics of physiotherapy applied in rheumatology and its objectives. 2. Functional disorders occurring as a result of rheumatoid diseases. 3. The consequences of rheumatoid diseases for the functioning and activity of patients. The influence of complications on the course of the physiotherapy provided. 4. The application and selection of orthopaedic supplies in the course of rheumatoid diseases. 5. Principles of the subjective and objective physiotherapeutic examination and of functional assessment in accordance with the ICF. 6. Physiotherapy recommended and applied in patients with rheumatic diseases, taking into account indications and contraindications as well	ZAO	Arithmetic mean of grades from tests. Graded credit Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Practical task – independent elaboration of a topic, demonstration, work under simulated and clinical conditions Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Observation of the student during classes

					as the patient's state of health and the stage of the course of the disease, conservative and surgical treatment. 7. The stages of physiotherapy and their characteristics. 8. Errors and complications in the course of the physiotherapy process. Monitoring the course of the physiotherapy process and its effectiveness. Classes: Case analysis – practical work with the patient in clinical conditions		
30.	TRAINING PROGRAMMES FOR OLDER PEOPLE	W01 – W03	U01 – U03	K01, K02	Lectures: 1. Health-promoting objectives of training for older people 2. Personal training – assumptions, foundations, application. 3. Components of physical fitness of older people 4. Diagnostics of physical fitness taking into account the physical parameters of older people. 5. Theory of the fundamentals of coordination, balance, flexibility, endurance and functional training. 6. Principles of programming various forms of training for older adults. 7. Methodology of implementing training objectives. Classes: 1. Diagnostics of motor abilities. 2. Training means in personal training. 3. Technique of performing exercises and methodology of combining them. 4. Training forms in the training of older adults. 5. Monitoring of training effects. 6. Supporting personal training	ZAO	Group work, classes, discussion, preparation of a presentation on a given topic – problem-based solution
31.	HISTORY OF PHYSIOTHERAPY	W01	U01	K01	Lectures: Origins and development of rehabilitation. Relationships between rehabilitation and physical culture over the centuries. Historical factors in the development of rehabilitation. 2. Founders of world and Polish rehabilitation. The first rehabilitation centres in Poland and worldwide. History of massage. 3. Development of concepts and methods of physiotherapy and rehabilitation in individual medical disciplines.	ZAO	Graded credit based on: active participation in classes, discussion, preparation of an essay

					4. History of sport for people with disabilities. History and development of physical therapy and spa treatment in Poland and worldwide. 5. Historical outline of rehabilitation supplies and the development of orthopaedic workshops. 6. History and development of the education of physiotherapists in Poland and worldwide. 7. Activities of social and scientific societies significant in the development of rehabilitation and physiotherapy.		
32.	SIGN LANGUAGE	W01, W02	U01	K01	Lectures: 1. Methods of communicating with a deaf-mute patient using medical terminology. 2. Methods of notifying the family and providing assistance. 3. Informing the patient about nursing procedures. 4. Obtaining information about the patient and their environment. 5. Informing the patient about the diagnostic procedure. Classes: Sign language in the field of medical terminology. 2. Methods of communicating with a deaf-mute patient. 3. Dactylographic, static, dynamic, numerical and geographical signs. 4. Informing the patient about the diagnostic procedure.	ZAO	Report: “Deaf people in Poland: statistics, problems and communication barriers, Deaf culture.”
33.	FOREIGN LANGUAGE – ENGLISH	W01 – W03	U01	K01	Classes: Part I A1. grammatical tenses – revision and extension of selected material with new applications, A2. forming questions about the subject and the object, A3. the language of correspondence: formal and informal letter, email, A4. family and interpersonal relationships – lexical exercises and typical collocations, A5. weak and strong forms of auxiliary verbs, A6. intonation patterns in interrogative forms, A7. how to write and speak more fluently – sentence connectors, A8. principles of writing short press articles, A9. formal and informal polite expressions on the example of a telephone conversation A10. description of a workstation – lexical exercises A11. specialist language – field-specific:	ZAO	Homework, knowledge tests, in-class activity, group presentation. Credit awarded after each semester (formative assessment). The module ends with a final credit (after Semester III).

					A1. grammatical tenses - revision and extension of selected material with new applications. A2. how to say the same thing differently - paraphrasing utterances. A3. attitudes and stereotypes – comparative structures, regular and irregular comparison of adjectives, strong adjectives. A4. constructions: used to, get used to, would rather and wish. A5. modal verbs expressing ability, capability and necessity. A6. tag questions – expressing a request. A7. travel and means of transport – thematic vocabulary. A8. the language of suggestion, ways of commenting and giving opinions. A9. application letter and CV – the form and principles of creating it, A10. polysemous nouns on the example of personal traits. A11. principles of writing short advertising articles. A12. characteristics of written texts in “for and against” essays A13. specialist language: Part II A1. grammatical tenses - revision and extension of selected material with new applications. A2. how to say the same thing differently - paraphrasing utterances. A3. attitudes and stereotypes – comparative structures, regular and irregular comparison of adjectives, strong adjectives. A4. constructions: used to, get used to, would rather and wish. A5. modal verbs expressing ability, capability and necessity. A6. tag questions – expressing a request. A7. travel and means of transport – thematic vocabulary. A8. the language of suggestion, ways of commenting and giving opinions. A9. application letter and CV – the form and principles of creating it, A10. polysemous nouns on the example of personal traits. A11. principles of writing short advertising articles.		

					A12. characteristics of written texts in “for and against” essays A13. specialist language: Part III A1. grammatical tenses – revision and extension of selected material with new applications, A2. conditional sentences, A3. causative use of the verbs “have” and “get” A4. hypothetical situations – emotions and giving advice – lexical and grammatical tasks, A5. phrasal verbs, A6. prepositions and prepositional phrases A7. quantifiers A8. the passive voice. A9. subordinate and coordinate complex sentences A10. review of a book, film, favourite website – complex sentences and principles of paragraph construction A11. specialist language: Part IV A1. grammatical tenses – revision and extension of selected material with new applications, A2. reported speech. A3. verb forms – infinitive and gerund expressions A4. media, current and historical events – vocabulary, A5. word formation – prefixes and suffixes on the example of terminology of environmental protection and ecology A6. selected cultural issues, A7. work and employment – lexical tasks A8. technology and modern technical solutions – lexical tasks A9. idiomatic expressions A10. emphatic structures A11. specialist language		
34.	FOREIGN LANGUAGE - RUSSIAN	W01 – W03	U01	K01	Classes: Grammatical tenses – revision and expansion of selected material with new applications, 2. Forming questions about the subject and the object, 3. The language of correspondence: formal and informal letter, email, 4. Family and interpersonal relationships – lexical exercises and typical collocations, 5. Weak and strong forms of auxiliary verbs, 6. Intonation patterns in interrogative forms,	ZAO	Homework, knowledge tests, in-class activity, group presentation. Credit awarded after each semester (formative assessment). The module ends with a final credit (after Semester V).

					7. How to write and speak more fluently – sentence connectors, 8. Principles of writing short press articles, 9. Formal and informal polite expressions on the example of a telephone conversation, 10. Description of a workplace – lexical exercises, 11. Specialist language in the field of Physiotherapy		
35.	KINESIOLOGY	W01 – W03	U01, U02	K01, K02	Lectures: The human being as a "biomachine" with power-supply and control systems. Introduction to general terminology; basic concepts: segment, biokinematic pair, biokinematic chain, range versus reach of movement, degrees of freedom of movement, axes and planes of movement 2. Bones as a supporting and protective element and as bony levers. Functional and morphological classification of bone connections; elements of the biological protection of joints 3. Morphological determinants of the range of movement in selected joints of the trunk and limbs. Ligaments and muscles as stabilizers and limiters of movement. Shock-absorbing elements in the passive and active locomotor system 4. Classifications of muscles (morphological and functional). Forms of muscle action (concentric, eccentric, stabilizing); the "anti-gravity" action of muscles. The concept of the lever arm and the moment of force. Components of muscle force. Muscle work under static and dynamic conditions. 5. The mechanism of muscle contraction, types of muscle contractions, factors determining muscle strength. Individual and group action of muscles. The specificity of the work of multi-joint muscles. 6. Organization of motor activities; centres and levels of movement control (centres and pathways of the pyramidal and extrapyramidal systems). The concept of functional symmetry (lateralization). Sensation – centres and pathways of superficial sensation and deep sensation; regulation of muscle tone and the coordination of voluntary and automated movements 7. Basic knowledge of anthropomotorics: the structure, manifestations and determinants of human motor abilities and motor skills. Classes: Functional analyses of all bone connections of the trunk and limbs on a living subject (degrees of mobility, names of movements, determination of the axes and planes of movements)	ZAO	Practical credit in the scope of problem-related dysfunctions – case analysis and preparation of a presentation

					2. Functional analyses of the muscles acting on the individual sections of the spine. The rotational sling of the spine. The upright posture of the human being – the participation of muscles and joints. The participation of certain back muscles in movements of the upper limb (the so-called "limb" system of the trunk) 3. Functional analyses of the muscles of the abdominal wall; the principle of action of the abdominal press. The action of muscles on the pelvis, the angle of pelvic inclination versus the magnitude of the lumbar lordosis. Functional analyses of the muscle groups of the trunk in various body positions. 4. Functional analyses of the muscle groups of the upper limb. The participation of certain chest muscles in movements of the upper limb (the so-called "limb" system of the chest). Skeletal elements of the upper limb attesting to its adaptation to gripping and manipulative functions. Analysis of grip (the participation of joints and muscles). Examination of muscles on a living subject, assessment of the action of the individual muscle groups. Muscle work under atypical conditions, with various types of disability (crutches, wheelchair, quadrupedal movement, crawling, etc.) 5. Functional analyses of the muscle groups of the lower limb. Skeletal elements of the lower limb attesting to its adaptation to supporting and locomotor functions. The arch of the foot; active and passive stabilizers. 6. Analysis of normal gait (the participation of joints and muscles), examples of pathological gait in various dysfunctions of the locomotor system and the movement-control system. Examination of muscles on a living subject, assessment of the action of the individual muscle groups. Selected issues of advanced analysis of human gait after strokes, lower-limb amputation, neuromuscular disorders 7. The mechanics of the chest. Functional analysis of the principal and accessory inspiratory and expiratory muscles. 8. The pathways of sensory nerve impulses (from receptors of strictly defined regions of the body to the centres).		

					9. The pathways of motor nerve impulses for voluntary movements (from the centres to strictly defined effectors) 10. Analysis of disorders (e.g. paralytic effects) of the locomotor system at various levels of damage to the nervous system (damage to the peripheral nerves and damage to the central nervous system).		
36.	KINESIOTHERAPY	W01 – W06	U01 – U06	K01	Lectures: Presentation of the form of completion of the course. Familiarization with the content of the teaching programme. Provision of the required literature. 2. Scientific foundations, nomenclature and systematics. Instruments and accessories applied in kinesiotherapy and in patient assessment. 3. Systematics of patient examination. 4. Characteristics of the physical examination. The interview and its components. Its significance for the purposes of planning kinesiotherapy 5. Learning and understanding the theoretical, methodological and practical foundations of conducting the subjective examination. 6. The patient examination card. Non-specific examination in the form of: pain assessment, sensation assessment, palpation examination and reflex examination, inspection. 7. Learning and understanding the theoretical, methodological and practical foundations of conducting the physical examination. Linear measurements: lengths and circumferences of the upper limbs and lower limbs. Knowledge and understanding of linear measurements as a tool for assessing structural and functional disorders caused by disease or injury, as a diagnostic tool and a method of assessing the patient's condition, the structure and function of the body, and the patient's activity in various disease states. Methods of recording results. 8. Orientation measurements, examination of functional shortening in the lower limbs. Functional shortening and actual functional shortening. Methods of recording results in the patient examination card. 9. Learning and understanding the theoretical, methodological and practical foundations of conducting the measurement of ranges of movement. Learning the topographical points, the instruments, the methodology of practical measurement and the manner of recording the results.	EGZ	Examination - test Practical credit. Preparation of documentation of the course of kinesiotherapy. Observation of the student during classes. The final grade is the arithmetic mean of the grades from all courses. A condition for passing the final examination is obtaining a minimum of 51% of the points from the examination test. Points obtained during classes in the form of a bonus will be taken into account when awarding the final grade.

					10. Measurements of the ranges of movement of the spine 11. Measurements of the ranges of movement in the joints of the upper limbs as a tool for assessing structural and functional disorders caused by disease or injury, as a diagnostic tool and a method of assessing the patient's condition, the structure and function of the body, and the patient's activity in various disease states. 12. Measurement of the ranges of movement in the joints of the lower limbs. 13. Learning and understanding the theoretical, methodological and practical foundations of conducting the muscle test: topographical points, the methodology of practical measurement and the manner of recording the results. 14. The Lovett test – clinical assessment of muscle strength according to Zembaty. Assessment of the muscle strength of the trunk muscles and the spinal muscles 15. Knowledge and understanding of the Lovett test as a tool for assessing structural and functional disorders caused by disease or injury, as a diagnostic tool and a method of assessing the patient's condition, the structure and function of the body, and the patient's activity in various disease states. 16. Assessment of the length of the muscles of the spine and trunk and of the upper and lower limb. 17. Learning and understanding the theoretical, methodological and practical foundations of conducting the functional examination of the spine used for the purposes of diagnostics in local kinesiotherapy. Selected clinical tests as a tool for assessing structural and functional disorders. 18. Learning and understanding the theoretical, methodological and practical foundations of conducting the functional examination of the shoulder girdle and upper limbs and of the pelvic girdle and lower limb used for the purposes of diagnostics in local kinesiotherapy. Selected clinical tests as a tool for assessing structural and functional disorders. 19. Learning and understanding the theoretical, methodological and practical foundations of conducting gait assessment. The gait cycle and gait determinants. Causes of pathological gait. The Trendelenburg and Duchenne signs. Methods of		

					gait assessment. Verticalization and gait re-education. 20. Systematics of exercises in kinesiotherapy. 21. Physical effort and its impact on the human body. The benefits resulting from movement and the consequences of immobility. Physical fitness versus physical activity. Methods and tools for assessing physical fitness and physical activity. 22. The facilities for kinesiotherapeutic exercises. Characteristics and application. 23. Active exercises in suspension (assisted). The aim and rationale for selecting the exercises discussed on the basis of their physiological significance, indications and contraindications, and the type of dysfunction, the condition and age of the patient. Methodology of the exercises. 24. Active exercises in suspension with resistance. The aim and rationale for selecting the exercises discussed on the basis of their physiological significance, indications and contraindications, and the type of dysfunction, the condition and age of the patient. Methodology of the exercises. 25. Self-assisted and guided exercises. The aim and rationale for selecting the exercises discussed on the basis of their physiological significance, indications and contraindications, and the type of dysfunction, the condition and age of the patient. Methodology of the exercises. 26. Active free exercises and active exercises with resistance. The aim and rationale for selecting the exercises discussed on the basis of their physiological significance, indications and contraindications, and the type of dysfunction, the condition and age of the patient. 27. The aim and methodology of de Lorme and Watkins training, and of Hettinger and Müller training. Dynamometric examination. 28. Redressing exercises and traction. The aim and rationale for the use of redressing exercises and traction based on their physiological significance, indications and contraindications as well as the type of dysfunction, condition and age of the patient. Methodology of exercises and traction. 29. Post-isometric Muscle Relaxation. The aim and methodology of performance. 30. Synergistic exercises. Relative and absolute synergies. 31. Biological feedback. The use of modern equipment for exercises with biofeedback.		

					32. Isometric exercises, the aim and rationale for selecting the exercises. Indications and contraindications. Methodology of the exercises. 33. Stretching and self-stretching exercises, the aim and rationale for selecting the exercises. Indications and contraindications. Methodology of the exercises. 34. Coordination and balance exercises, the aim and rationale for selecting the exercises. Indications and contraindications. Methodology of the exercises. 35. The aim and rationale for selecting the discussed exercises based on their physiological significance, indications and contraindications as well as the type of dysfunction, condition and age of the patient. Methodology of the exercises. 36. Breathing exercises. Relaxation exercises. 37. General fitness exercises. Morning gymnastics. Exercises in water (Aquaaerobic, the Halliwick and Watsu methods). Manual and self-care exercises. The aim and rationale for selecting the discussed exercises based on their physiological significance, indications and contraindications as well as the type of dysfunction, condition and age of the patient. Methodology of the exercises.		
					Classes: Preparation of the patient for the exercises. Preparation of the workstation for carrying out the exercises. 2. Subjective examination for the purposes of kinesiotherapy - discussion and conduct of the examination. Preparation of the patient examination card. Types of recording of results used in kinesiotherapy. 3. Physical examination of the patient: inspection, approximate measurements. Examination of superficial sensation: pain sensation, temperature sensation and touch sensation. Examination of deep sensation: position sense and movement sense. Palpation examinations. Discussion and conduct of the examination. Completion of the documentation of the patient's health condition and the programme of physiotherapeutic procedures. 4. Linear measurements: lengths and circumferences of the limbs, approximate measurements, examinations of functional shortening in the lower limbs. Actual versus functional shortening. Discussion and conduct of the examination. Preparation of correct documentation.		

					5. Measurements of the range of motion of the spine. Measurement methodology. Discussion and conduct of the examination. Preparation of correct documentation. 6. Measurements of the range of motion in the joints of the lower limbs. Measurement methodology. Discussion and conduct of the examination. Preparation of correct documentation. 7. Measurements of the range of motion in the joints of the upper limbs. Measurement methodology. Discussion and conduct of the examination. Preparation of correct documentation. 8. The Lovett test - assessment of the strength of the trunk muscles. Assessment of the strength of the facial muscles. Review of the topography and function of the muscles responsible for a given movement. Discussion and conduct of the examination. Preparation of documentation. 9. The Lovett test - assessment of the strength of the muscles of the pelvic girdle and the lower limbs. Review of the topography and function of the muscles responsible for a given movement. Discussion and conduct of the examination. Preparation of documentation. 10. Assessment of muscle length and conduct of the examination. 11. Functional examination of the spine used for the purposes of local kinesiotherapy diagnostics. 12. Functional examination of the hip girdle and lower limbs used for the purposes of local kinesiotherapy diagnostics. 13. Functional examination of the upper limb girdle and the upper limb used for the purposes of local kinesiotherapy diagnostics. Selected clinical tests. 14. Assessment of body posture. Discussion and conduct of the examination. Normal gait. Gait cycle and determinants. Changes in gait caused by pain, restrictions of movement in the joints, in the case of pareses and paralyses. The Trendelenburg and Duchenne signs. 15. Passive and active-assisted exercises. Starting positions for the exercises. Learning to carry out the exercises. 16. Active exercises in suspension, in suspension with resistance. Learning the operation and application of the UGUL system for exercises in		

					suspension and in suspension with resistance. Planning, selection and practical performance of the appropriate exercise (kinesiotherapy techniques) based on the aim, indications and contraindications as well as the methodology of performing the exercises. 18. Self-assisted and guided exercises. Planning, selection and practical performance of the appropriate exercise (kinesiotherapy techniques) based on the aim, indications and contraindications as well as the methodology of performing the exercises. 19. Free active exercises. Active exercises with the use of equipment, coordination, balance and sensorimotor exercises. Planning, selection and practical performance of the appropriate exercise (kinesiotherapy techniques) based on the aim, indications and contraindications as well as the methodology of performing the exercises. 20. Active resistance exercises. Isometric exercises. The de Lorme and Watkins training. The Hettinger and Müller training. Planning, selection and practical performance of the appropriate exercise (kinesiotherapy techniques) based on the aim, indications and contraindications as well as the methodology of performing the exercises. 21. Redressing exercises and traction. Planning, selection and practical performance of a redressing exercise or traction based on the aim, indications and contraindications as well as the methodology of performing the exercises. 22. Post-isometric muscle relaxation. Planning, selection and practical performance of PIR based on the aim, indications and contraindications as well as the methodology of performing the exercises. 23. Synergistic exercises (absolute, relative, contralateral and ipsilateral). Planning, selection and practical performance of the appropriate exercise (kinesiotherapy techniques) based on the aim, indications and contraindications as well as the methodology of performing the exercises. 24. Breathing exercises, drainage positions, relaxation exercises. Schultz's autogenic training. Jacobson's training. Planning, selection and practical performance of the appropriate exercise (kinesiotherapy techniques) based on the aim, indications and contraindications as well as the methodology of performing the exercises.		

					25. Isometric exercises - starting positions for the exercises. Learning to carry out the exercises. Stretching and self-stretching exercises - starting positions for the exercises. Learning to carry out the exercises. Coordination and balance exercises - starting positions for the exercises. Learning to carry out the exercises. 26. Verticalization, gait training, safeguarding, learning to fall, types of crutch gait. Patient transfers. Gait re-education exercises, exercises in the field of postural education and re-education as well as self-care exercises and re-education of upper limb function. Planning, selection and practical performance of the appropriate exercise (kinesiotherapy techniques) based on the aim, indications and contraindications as well as the methodology of performing the exercises. 27. General fitness exercises. Morning gymnastics. Exercises using biological feedback - discussion. Team exercises. Planning, selection and practical performance of the appropriate exercise (kinesiotherapy techniques) based on the aim, indications and contraindications as well as the methodology of performing the exercises. 28. Elements of selected methods: mechanical, educational, neurophysiological and others.		
37.	ICF Classification	W01, W02	U01	K01, K02	Lectures: Introduction to the subject of the lectures, discussion of the method of completion and presentation of the literature. 2. Disability - definition, classification and consequences. 3. Introduction to the ICF (main assumptions, history) 4. The integrated bio-psycho-social model of functioning and disability. Aims, application and properties of the ICF. 5. Review of the component elements of the ICF - body structure and function, activity and participation. 6. Structure and codes of the classification – coding of information concerning health and functioning. Coding using qualifiers. Categorical profile. 7. Intervention table – planning and evaluation of the support provided. 8. Application of the ICF in the assessment of the patient for the purposes of rehabilitation and physiotherapy.	ZAO	Presentation of a selected topic - Assessment of the correctness of the preparation and recording of the assigned topic. Observation during the conduct of methods and techniques. Credit on the basis of activity and a positive attitude during classes.

					Classes: The integrated bio-psycho-social model of functioning and disability – recording of information concerning functioning and disability in the ICF. 2. Coding using qualifiers – practical exercises. 3. Coding using qualifiers: linking health information with the ICF classification, categorical profile – the ability to read the information contained in ICF codes. 4. Application of the ICF in the assessment of the activity of children and adults for the purposes of physiotherapy. 5. Documenting the results of the patient's functional assessment in the physiotherapeutic documentation.		
38.	MOTOR EDUCATION AND THE METHODOLOGY OF TEACHING MOVEMENT	W01, W02	U01 – U04	K01	Lectures: The role of physical activity in the life of a healthy and disabled person. 2. The relationships between physical and health culture. 3. Principles of the selection of content and the organization of physical education and upbringing and their application in physiotherapy. 4. Long- and short-term planning of physical activity classes. 5. The structure of a physical activity class unit. 6. Division and systematics of physical exercises. Principles and forms of conducting physical activity classes. 8. Methods of conducting physical activity classes. 9. Motor acts in a developmental and kinesiological perspective. 10. Types of physical activity. Static and dynamic exercises. The use of exercises applied in physiotherapy. 11. The process of teaching movement: motor education and re-education, stages of forming a motor habit, stages of practical action in physiotherapy. 12. Safety principles in physical activity classes, the most common causes of accidents. 13. Planning the process of teaching motor activities to persons with disabilities. 14. Assessment and evaluation of the process of teaching motor skills as self-monitoring of the physiotherapist's work and as self-monitoring and self-assessment by the patient. 15. Individualization in the process of physical education and in physiotherapy.	ZAO	activity in classes written elaboration of an assigned problem topic - preparation of a paper (in written form or as a multimedia presentation), in groups.

					Classes: Systematics of exercises for the needs of the lesson unit. Basic parameters of exercises: starting position, course of movement, final position, exercise tempo, exercise notation. 2. The lesson unit and the exercise unit as the basic form of the physiotherapist's work: the course of the lesson and the principles of lesson construction (comprehensiveness, variability of work, gradation of exertion intensity). 3. The lesson plan as a detailed plan of the classes. Organization and conduct of the lesson unit, elements of lesson organization, forms of division, forms of arrangement, forms of conduct. 4. Development of motor abilities (essence, properties, and examples of methodical and didactic means that can be used in successive stages of the motor development of children, adolescents, and adults). 5. Methods of carrying out motor tasks - the essence, properties, examples, and application in physiotherapy of specific methods depending on the tasks and on the age and condition of the patient.		
39.	USG IN IMAGING OF THE LOCOMOTOR SYSTEM	W01, W02	U01, U02	K01, K02	1. Diagnosing a patient with pain and dysfunctions of the locomotor system using a standardized international protocol of OMT functional examination and assessment, taking into account USG imaging according to recognized international diagnostic criteria, including ESMR. 2. Recognizing and correctly describing typical abnormalities in the USG image and, on this basis, planning appropriate therapy. LIST OF USG STRUCTURES - upper limb: Tendon of the long head of the biceps brachii (transversely, longitudinally) Tendon of the supraspinatus muscle (longitudinally, transversely)	ZAO	Single-choice test - 15 questions Partial practical credits, observation of the student's work, performance of a USG examination - interpretation of results

					Tendon of the subscapularis muscle (longitudinally, transversely) and the coracoid recess Subacromial-subdeltoid bursa Acromioclavicular joint Subacromial space (functional acromiohumeral joint) Labrum and posterior recess of the glenohumeral joint Common extensor origin of the wrist Common flexor origin of the wrist Tendon of the triceps brachii muscle, posterior recess of the elbow joint Ulnar nerve, cubital tunnel, Osborne's ligament Median nerve in the carpal tunnel (carpal tunnel) LIST OF USG STRUCTURES - lower limb: Suprapatellar recess Articular cartilage (intercondylar, femur) Patellar ligament (longitudinally, transversely) Collateral ligaments of the knee joint (tibial, fibular) Achilles tendon Plantar aponeurosis Upper ankle joint, anterior recess of the joint Anterior talofibular ligament, ligaments of the ankle joint Localization of a Baker's cyst Medial meniscus Pes anserinus Anterior recess, acetabulum, and labrum of the hip joint Iliotibial band, supratrochanteric region SONOFEEDBACK Transverse abdominis muscle - localization, activation, training under USG control Linea alba of the rectus abdominis - localization, training under USG control Subacromial space - localization, correction, training under USG control		

					Trapezius muscle, rhomboid muscles - localization, activation, training under USG control Serratus anterior muscle - localization, activation, training under USG control. Examination of the menisci of the knee joint in the longitudinal posterolateral and posteromedial application, assessment of the vessels and nerves of the popliteal fossa, assessment of the vessels and nerves of the hip joint (groin), SCM biofeedback in cervical spine training, assessment of the ulnar nerve in the ulnar nerve groove/sulcus ("ulnar groove syndrome"), assessment of the tibiofibular syndesmosis and others.		
40.	DIETARY TREATMENT OF ELDERLY PEOPLE	W01 – W04	U01 – U04	K01 - K04	Lectures: Ageing and the changes occurring in the body of elderly people related to nutrition. 2. Assessment of nutrition and nutritional status in old age. 3. Nutritional standards, energy requirements, and nutrients in the nutrition of elderly people. Nutritional errors of elderly people and prevention strategies. 5. Principles of meal planning for elderly people taking into account their state of health. Classes: Determining the energy and nutrient requirements for elderly people. 2. Analysis of nutritional errors and of nutrition-related limitations in old age, as well as strategies for preventing nutritional errors. 3. Assessment of nutrition and nutritional status in old age, determination of weight-and-height indices, using the NRS, MNA, and SGA scales. 4. Meal planning for elderly people in selected diet-dependent diseases.	ZAO	Presentation - Practical task - Assessment of the student's work during classes Credit without a grade on the basis of: active participation in classes, including in the discussion on the principles of healthy nutrition for elderly people.
41.	MASSAGE	W01 – W05	U01 - U05	K01 - K04	Lectures: Historical outline, definition and classification of massage, methods and forms of massage, organization, occupational health and safety of the masseur's work 2. Theoretical introduction to therapeutic massage, discussion of therapeutic massage techniques and relaxation positions. 3. Fundamentals of therapeutic massage (structure of the skin and muscle, physiology of muscle	EGZ	Written examination - test with open-ended questions. Practical credit - performance in accordance with the requirements and

					contraction). The effect of therapeutic massage on the physiological reactions of the following systems: circulatory, lymphatic, nervous and muscular, digestive, urogenital, endocrine. 4. Theoretical, methodical and practical foundations of massage - psychosomatic characteristics of the masseur, principles of performing massage. Characteristics of classic massage techniques, equipment of the massage room. Indications and contraindications for classic massage. 5. Methodology of performing massage techniques in working on individual areas of the body. Characteristics and application of various types of massage in physiotherapy. Principles of performing segmental massage. Mechanical massage - types of devices used to perform massage. Indications and contraindications for massage.		principles of massage in a given problem unit Observation during the classes
					Classes: Classic massage of the back - planning and performing the procedure using massage techniques. 2. Classic massage of the spine - planning and performing the procedure using massage techniques. 3. Classic massage of the buttocks - planning and performing the procedure using massage techniques. 4. Classic massage of the nape and the sternocleidomastoid muscle with the posterior part of the cervical spine - planning and performing the procedure using advanced manual techniques. 5. Classic massage of the abdominal wall - planning and performing the procedure using massage techniques. 6. Classic massage of the chest - planning and performing the procedure using massage techniques. 7. Classic and compression massage of the face - planning and performing the procedure using massage techniques. 8. Classic massage of the fingers, wrist joint, forearm - planning and performing the procedure using massage techniques. 9. Classic massage of the elbow joint, arm and shoulder joint - planning and performing the procedure using massage techniques.		

					10. Classic massage of the upper limb, partial and complete - planning and performing the procedure using massage techniques. 11. Classic massage of the foot, ankle joint, Achilles tendon, lower leg - planning and performing the procedure using massage techniques. 12. Classic massage of the knee joint, thigh, hip joint - planning and performing the procedure using massage techniques. 13. Classic massage of the lower limb, partial and complete - planning and performing the procedure using massage techniques. 14. Segmental massage - planning and performing using massage techniques 15. Massage in selected disease entities - planning, selection of techniques for the chosen disease entity and performing the procedure using massage techniques.		
42.	PHYSICAL MEDICINE (Physical medicine - physiotherapy, balneoclimatology and biological regeneration)	W01 – W04	U01 - U05	K01	Lectures: The place of physiotherapy among the medical sciences. Physical energies used in physical medicine and the principles of their application. 2. Fundamentals of the use of the electric field in physical therapy. Types of currents used in electrotherapy, general methodology of performing procedures with direct current and alternating currents. Occupational health and safety (BHP) in the electrotherapy room. 3. Biophysical foundations of procedures using direct current. Characteristics of therapeutic substances introduced into the body via the transdermal route. Methodology and safety of galvanization and iontophoresis procedures. 4. Low-frequency currents. Types of procedures: possibilities and limitations of their application. Reaction of excitable tissue to current: qualitative and quantitative electrodiagnostic methods. Indications and contraindications for procedures using low-frequency currents. 5. Medium-frequency currents. Theoretical, methodical and practical foundations of the therapy. The essence of exogenous and endogenous interference. Application of medium-frequency currents in treatment. The effect of the frequency of a static and dynamic interference field on tissue effects. Indications and contraindications for procedures using medium-frequency currents.	EGZ	Written examination satisfactory (dst.) 51-60 %; satisfactory plus (dst. plus) 61-70 % good (db.) 71-80 %; good plus (db. plus) 81-90 % very good (bdb.) 91-100 % Preparation of a paper on a topic assigned by the instructor Practical credit: performing a physiotherapeutic procedure, comprehensive operation of physiotherapy apparatus. Completing the documentation of physical procedures.

					6. Biological action of sonotherapy. Therapeutic ultrasound apparatus. Methodology and indications for ultrasound treatment. 7. Slow-changing magnetic field with high and low induction values. Effect on the body: indications and contraindications for magnetotherapy and magnetostimulation procedures. 8. High-frequency electromagnetic fields. Generation of electromagnetic oscillations and their effect on the living organism. Thermal effect in therapeutic methods using a high-frequency electromagnetic field. Usefulness and safety of the procedures. 9. Light as an electromagnetic wave, the physical parameters of this wave. Methods of light therapy and the possibilities and limitations in the use of UV and IR radiation. Indications and contraindications for light therapy procedures. Occupational health and safety (BHP) principles in light therapy rooms. 10. Laser biostimulation. High-energy lasers - therapeutic laser apparatus, indications and contraindications for the procedure, safety of work with the laser, performing procedures using the contact and non-contact method in various disease entities. 11. Shock wave - classification and characteristics of generators, principles of application, biological action, indications and contraindications Introduction to the course. Basic terminology. Historical outline of balneotherapy. 2. Theoretical, methodical and practical foundations of balneology and biological regeneration. Indications and contraindications for the application of balneoclimatology and biological regeneration procedures. 3. Peloid therapy - characteristics of peloids, effect on the body, types and methodology of procedures, indications and contraindications. 4. Climate and weather-forming factors, climatic complexes, biometeorological indices. Meteorotropism. Climatotherapy - effect on the body, types and methodology of procedures, indications and contraindications. Heliotherapy. 5. Therapeutic use of aerosols; types of medicines and devices used for inhalation. 6. Classification of water in balneology and its chemical analysis. Crenotherapy. Natural bottled		

					waters - industry standard, labelling, types (6.11, 16.11). 7. Baths in mineral waters and therapeutic gases. Saline carbon dioxide bath, sulphide-hydrogen sulphide baths, radon baths, baths in dry carbon dioxide - effect on the body, methodology of the baths, indications and contraindications. 8. Water as a therapeutic factor with diverse effects on the body. Methodology and safety of hydrotherapy procedures. Types of hydrotherapy procedures. 9. Thermotherapy. Mechanisms of the body's thermal thermoregulation. 10. Heat therapy. The effect of heat on the human body. Review and methodology of local and systemic heat-therapy procedures (Finnish sauna, Roman sauna, IR, paraffin, locally applied compresses). Indications and contraindications for the procedures. 11. Cryotherapy. The effect of cold on the human body. Review and methodology of local and whole-body cryotherapy procedures. Indications and contraindications for the procedures. 12. Rest - the physiology of recovery processes. Supercompensation. Passive and active rest in sport and biological regeneration. Regenerative training. The role of physiotherapy in the recovery process. 13. Biological regeneration. Systematics of regeneration measures, programming of biological regeneration. Systematics of biological regeneration measures. Tasks and principles of applying biological regeneration measures. 14. System of psychological measures of biological regeneration; the role of relaxation in sport and biological regeneration (autogenic training, music therapy).		
					Classes: 1. Construction and practical operation of the electrotherapy apparatus, preparation and selection of pads and treatment electrodes. Types of electrodes, their use and maintenance. 2. Types of currents used in electrotherapy and the related hazards. Galvanic current - practical performance of procedures using direct current, selection and control of the current dose, assessment of the skin reaction. Analysis of safety principles in the electrotherapy room.		

					3. Low-frequency impulse currents - practical performance of procedures using low-frequency alternating currents, selection and control of the current dose, assessment of the skin reaction. Analysis of safety principles in the electrotherapy room. 4. Electrostimulation - types of electrostimulation, selection of procedure parameters. Practical performance of electrostimulation for normally innervated muscles, for denervated muscles. Electrostimulation in muscle spasticity. 5. Electrodiagnostics - qualitative and quantitative assessment of the neuromuscular system. Practical performance of plotting the i/t curve. Interpretation of the i/t curve. 6. Medium-frequency impulse currents - modulation of medium-frequency currents, selection of currents and procedure parameters. Indications and contraindications for the procedures. Practical performance of the procedures 7. High-frequency currents - short-wave diathermy, capacitor and inductive method, distribution of lines of force in the electromagnetic field, selection of electrodes and their positioning relative to each other. Therapy with a pulsed high-frequency field. Occupational health and safety (BHP) principles concerning the use of high-frequency currents. 8. Discussion and operation of lamps for irradiation with visible and infrared radiation. Luminous and non-luminous generators. Discussion of occupational health and safety (BHP) principles in the field of light therapy. Practice of procedures using the infrared lamp. 9. Discussion of the construction of the quartz burner and the lamp for UV irradiation. Maintenance and proper use of the lamps. Discussion and determination of the biodose. 10. Laser therapy - discussion of laser therapy apparatus, methodology of procedures, calculation of the treatment dose. Occupational health and safety (BHP) of the procedures 11. Construction and operation of sonotherapy apparatus. Preparation of the treatment field, selection of parameters, calculation of the procedure energy and practice of the ultrasound technique.		

					12. Operation of low-frequency magnetic field generators. Performing magnetotherapy procedures, selection of procedure parameters. Discussion of occupational health and safety (BHP) principles for magnetotherapy 13. Therapeutic use of cold - cold-therapy procedures, classification, discussion of the operation of apparatus for cryotherapy procedures. Performing cryotherapy procedures. Discussion of occupational health and safety (BHP) principles 14. Therapeutic use of heat - dry heat and moist heat, discussion of the methodology of the procedures. Paraffin procedures - types of procedures, performing paraffin and parafango compresses, observation of the thermal reaction 1. Organizational session. Getting acquainted with the group. Discussion of the course content, the principles of completing the course, occupational health and safety (BHP) regulations. 2. The importance of spa treatment, its place and role in contemporary medicine. Spa treatment - profiles of Polish health resorts and their distribution. Indications and contraindications for spa treatment. Spa tourism. 3. The role and significance of physical-therapy and balneological treatments in selected diseases of the nervous system. 4. The role and significance of physical-therapy and balneological treatments in selected diseases of the locomotor system (orthopaedic and rheumatic diseases). 5. The role and significance of physical-therapy and balneological treatments in selected diseases of the internal organs (cardiological, gynaecological and pulmonological diseases). 6. Familiarization with the treatments used in a given health resort (Nałęczów). 7. Familiarization with the methodology of inhalations – inhalation apparatus, techniques of using inhalers, therapeutic agents used in inhalations, graduation towers, subterranotherapy. 8. Familiarization with the methodology of the sauna and steam baths – discussion of the treatment methodology. 9. Familiarization with the methodology of various types of water treatments (affusions, rubbings, wrappings, showers, whirlpool baths).		

					10. Familiarization with and methodology of treatments that use natural raw materials (carbonic acid bath, brine bath). 11. Familiarization with the methodology of treatments using therapeutic peats. 12. Drinking cure with mineral waters – general principles of conducting the cure, indications and contraindications for the treatment. 13. Climatotherapy with consideration of the climate of Nałęczów. Application of the studied physical and balneological treatments in various disease entities.		

43.	METHODOLOGY OF SCIENTIFIC RESEARCH	W01	U01 – U06	K01	Lectures: The subject of research and research problems and their formulation 2. The research process and its stages 3. Goals and the general scheme of cognition 4. Acquiring information from the literature and online databases 5. Research hypotheses, reliability and reproducibility of results, verification, research methods, standards, recording of results, formation of research groups 6. Leadership and cooperation in a research team 7. Principles for processing the collected materials 8. Current research possibilities in the field of physiotherapy 9. Legal and ethical requirements related to conducting scientific research 10. Protection of intellectual property	ZAO	project, report on the performance of the task Activity and a positive attitude of the student during classes. Observation during classes
44.	SPECIAL METHODS IN PHYSIOTHERAPY (postural re-education, neuromuscular re-education, neurorehabilitation, neurodevelopmental therapy)	W01 – W07	U01 – U03	K01 – K03	Lectures; LECTURES: 1. Special Methods – introduction to the course. Explanation of concepts related to the course. Application of selected methods in physiotherapy. 2. Theoretical foundations, goals and application of the NDT-Bobath method. 3. Theoretical foundations, goals and application of the method according to Pocus and Block. 4. Theoretical foundations, goals and application of Sensory Integration. 5. Theoretical foundations, goals and application of the McKenzie method.	EGZ	Written examination Assessment of the student's work during classes

					6. Theoretical foundations, goals and application of the GDS fascial chains method. 7. Theoretical foundations, goals and application of the PNF method.		
					Classes: Foundations of the diagnostics of disorders in the NDT-Bobath method. Practical learning of selected elements of therapy. Selected therapeutic examples. Documentation of therapy. 2. Foundations of the diagnostics of disorders in the method according to Pocus and Block. 3. Practical learning of selected elements of therapy. Selected therapeutic examples. Documentation of therapy. 4. Foundations of the diagnostics of disorders in the SI method. 5. Practical learning of selected elements of therapy. Selected therapeutic examples. Documentation of therapy. 6. Foundations of the diagnostics of disorders in the McKenzie method. 7. Practical learning of selected elements of therapy. Selected therapeutic examples. Documentation of therapy. 8. Foundations of the diagnostics of disorders in the GDS fascial chains method. Practical learning of selected elements of therapy. Selected therapeutic examples. Documentation of therapy. 9. Foundations of the diagnostics of disorders in the PNF method. Practical learning of selected elements of therapy. Selected therapeutic examples. Documentation of therapy		

45.	GENERAL MODULE - Foundations of law (intellectual property law, medical law, civil law, labour law), occupational health and safety (BHP), Library, Information technology)	W01 – W06	U01 – U02	K01 – K03	Lectures: Legal norms and regulations – their types. Objects and subjects of law. 2. The legal system. The legislative process and other methods of creating law. 3. Interpretation of law. Application of law. General and special (administrative) judiciary. 4. Civil law – the subject and object of a civil-law relationship. Legal acts, legal capacity and the capacity to perform legal acts 5. Elements of criminal, commercial, administrative and labour law 6. Principles of employing persons with various degrees of disability. 7. Patients' rights. The right to health protection (International Classification of Functioning) 8. Legal liability of the physiotherapist. Selected aspects of practising the profession of physiotherapist 9. Selected issues of invention and copyright law in physiotherapy practice 10. Protection of intellectual property. BHP – occupational health and safety (BHP) principles in the work of the physiotherapist 2. Basic concepts in the field of occupational health and safety (BHP) and protection of the natural environment, as well as legal regulations. 3. Occupational safety - the duties of the employer and the employee Virtual Dean's Office. 2. The WSEI e-learning platform. 3. Open Source office suites. 4. Basic issues of networks and cybersecurity. Organization of the WSEI library – rules for making library collections available on site and for external use. Using source materials with respect for the principles of copyright law.	ZAO	Single-choice test (20 questions scored at 1 point for a correct answer)

46.	ADVANCED SOCIAL AND HUMANITIES MODULE (Clinical psychology and psychotherapy, Clinical communication)	W01 – W04	U01 - U05	K01 – K02	Classes: Specific features of clinical psychology as a theoretical and applied discipline. 2. Branches of clinical psychology. The pathogenetic and salutogenetic orientation in clinical psychology. 3. The concept of norm and pathology in clinical psychology. Ways of distinguishing normative from pathological behaviours: the statistical, socio-clinical, developmental and psychiatric criterion. 4. Classification of mental disorders. 5. Paradigms of clinical psychology: the biological, cognitive, learning, psychoanalytic and humanistic paradigms – basic ideas, areas of interest, treatment. 6. Selected issues in developmental-age psychopathology. 7. Introduction to the issues of stress and coping. 8. The concept and models of psychological diagnosis. 9. Fundamentals of clinical psychological diagnosis. 10. Methods of psychological assistance (methods of clinical psychology, health promotion, prevention, counselling, crisis intervention). Specialist psychotherapy versus psychological assistance and therapeutic communication; the main theoretical orientations in psychotherapy and psychological assistance 2. The therapeutic relationship in the work of a physiotherapist – its significance, features, boundaries, the phenomenon of transference and countertransference; the conditions for establishing a therapeutic relationship and the main obstacles to building it (favourable and unfavourable attitudes of the therapist, difficult patient behaviours) 3. Psychological tools needed in building the therapeutic relationship (empathy – active listening, assertiveness – techniques of assertive behaviour); personal resources stimulated during therapeutic communication with the patient (self-esteem, sense of support, sense of being understood, hope, sense of meaning, humour, motivation to recover, the ability to externalise feelings) The concept of clinical communication, its functions, the course of the communication process, and the causes of limitations and communication errors		Passing a knowledge test The student's completion of an assigned task in the form of The student receives the topic of a presentation, prepares it and presents it during classes. A maximum of 15 points may be awarded for completing the task. The student passes the learning outcomes if they have received at least 9 points for delivering the presentation. 15-14 points – the work meets all the listed criteria 13-12 points - the work meets most of the listed criteria, with minor imperfections 11-10 points – one of the criteria has been omitted or addressed incorrectly 9 points – two of the criteria have been omitted or addressed incorrectly.

					2. Goals of communication with the patient: models and protocols applied in various clinical situations (taking a patient history, conveying bad news, informing about unforeseen events, talking about the patient's emotions 3. Communication skills and techniques (active listening techniques, giving feedback, correcting unfavourable behaviours) 4. Communicating with members of the task team 5. Clinical communication in specific therapeutic situations (the paediatric patient, the mentally or neurologically ill patient, the elderly patient, the chronically ill and oncology patient)		
47.	BIOMEDICAL SCIENCES (biochemistry, medical biology, genetics)	W01 – W09	U01 – U03	K01	Lectures: Proteins of physiological importance – Amino acids. The structure and physicochemical properties of proteins. Haemoproteins – the structure and function of haemoglobin. Haemoglobin – the phenomenon of cooperativity in oxygen binding. Allosteric effectors. Haemoglobin and its derivatives. Plasma proteins – types, structure and function of plasma proteins; electrophoresis of plasma proteins. Haemoglobinopathies – sickle cell anaemia. 2. Enzymes as biological catalysts – Nomenclature. Properties (active site, coenzymes). The enzyme-substrate complex. Factors affecting the rate of reaction. Michaelis-Menten kinetics. Enzyme inhibition. Regulation of enzymatic activity. The use of enzyme inhibitors in treatment. Enzymes in clinical diagnostics. 3. Carbohydrate metabolism – Glycolysis. Oxidative decarboxylation of pyruvate. The Krebs cycle. The respiratory chain and oxidative phosphorylation. The metabolism of monosaccharides and disaccharides. The pentose phosphate pathway. Gluconeogenesis as well as the synthesis and breakdown of glycogen – the course of the processes, regulation. The Cori cycle, the glucose-alanine cycle. Genetic defects associated with carbohydrate metabolism. 4. Lipid metabolism – The structure and synthesis of fatty acids. Transport of fatty acids into the mitochondria. The activation and oxidation of fatty acids. The metabolism of phospholipids, glycolipids and eicosanoids. The biosynthesis and oxidation of ketone bodies. Cholesterol – structure, synthesis. Bile acids, steroid hormones. Genetic	ZAO	Each course concludes with a colloquium featuring open-ended questions. Participation in classes, work in groups

					defects associated with lipid metabolism. Lipoproteins – structure, types. The metabolism of lipoprotein complexes. Primary lipoprotein disorders. 5. Regulation of the body's energy metabolism through hormonal signalling – the metabolic effects of insulin and glucagon. Insulin-dependent and insulin-independent diabetes – consequences regarding the metabolism of carbohydrates, fats and proteins. 6. Metabolism of nitrogen compounds – Removal of nitrogen from amino acids. The urea cycle. Glucogenic and ketogenic amino acids. Folic acid and amino acid metabolism. Diseases associated with amino acid metabolism. The biosynthesis of catecholamines, creatine and nitric oxide. Nucleotide metabolism. The biosynthesis of haem; regulation. Porphyrias. Catabolism of haem. Bile pigments. Jaundice. 7. The role of the liver in the metabolism of ethanol. 8. Reactive oxygen species – the reactions by which they are formed in the body, their effects, and the methods of removing ROS – enzymatic and non-enzymatic. Examples of antioxidant dietary components. Basic phenomena concerning dynamic biochemistry and the functioning of the eukaryotic cell 2. The structure of the eukaryotic cell from a thermodynamic perspective. 3. The structure and self-organisation of biological membranes and their role in cell functioning and in creating the environment for biochemical reactions 4. Basic life cycles of the cell (anabolic and catabolic) – energetic, the biosynthesis of simple compounds and macromolecules with particular emphasis on proteins and nucleic acids. The cell cycle and its regulation. 5. Embryonic development, the stages of embryonic and sexual development 6. The organisation of genetic material. Genetic and epigenetic changes – mutations and chromosomal aberrations. The role of cells in the formation and organisation of tissues. Classes: Selected issues essential in the practice of a physiotherapist:		

					1. Mendelian (allelic) and non-Mendelian (non-allelic – mitochondrial, genomic imprinting, mosaicism, dynamic mutations) inheritance. Incomplete penetrance, variable expression of a trait. Polygenic inheritance. Multifactorial inheritance. The genetic determinants of blood groups and of serological conflict. 2. Types of genetic variability. Chromosomal and genomic mutations – types, inheritance, mechanisms of formation and their role in the pathogenesis of diseases. Mutagenic factors. 3. Sex chromosomes. The inheritance of sex and of sex-linked traits. Disorders of the heterochromosomes and the mechanisms of their formation in humans, examples of diseases. 4. Gene mutations 5. The structure and properties of nucleic acids. The structure of chromatin. The organisation of the human genome. 1. Genetic causes of cancers. Oncogenes, tumour suppressors. Cytogenetic abnormalities of cancer cells 2. Genetic counselling. Genetic tests and screening examinations. Prenatal and postnatal diagnostics. Molecular DNA analysis. Classical cytogenetics. The human karyotype, the methods of obtaining and examining it. Methods of differential staining of chromosomes (banding).		
48.	GENERAL PATHOLOGY	W01 – W05	U01	K01	Lectures: Pathology of the circulatory system: 2. Pathology of the respiratory system Pathology of the excretory system: concepts, pathomechanism, risk factors and causes, clinical symptoms, complications: 4. Pathology of the nervous system: 5. Coexisting diseases affecting the planning and course of physiotherapy. Acquiring the ability to analyse the symptoms of coexisting diseases for the physiotherapy process. Classes: The place of pathology among the medical sciences. The definition of disease, the classification of diseases, the course and outcome of disease. The concept of aetiology and pathogenesis. Genetic versus congenital disease. 2. Inflammation: characterisation of the cells participating in immune reactions and inflammation – classification, characteristic structural features and functions; the pathogenesis	ZAO	written credit, partial credits – formative assessment of the colloquium activity in classes

					of inflammation (vascular changes, the response of white blood cells – stages, oxygen-dependent and oxygen-independent mechanisms, the release of inflammatory mediators); inflammatory mediators: cytokines, interleukins, chemokines, derivatives of arachidonic acid, amines; the complement system (activation pathways, mechanism of action and functions); the classification of inflammations (acute inflammation, chronic inflammation), systemic and local symptoms. 3. Immunity: concepts; acquired and innate immunity, artificial and natural immunity; the mechanism of the humoral and cellular immune response; antigen presentation; histocompatibility antigens; the primary and secondary immune response. 4. Autoimmune diseases: the definition of immunological tolerance and its types; the definition and mechanisms of autoimmunisation, the pathogenesis of autoimmune diseases, the classification of diseases into organ-specific and non-organ-specific. 5. Hypersensitivity reactions: the concept of allergy, allergen and the causes of allergy; the types of hypersensitivity according to Gell and Coombs – their characteristics, examples; the causes, pathomechanism and symptoms of anaphylactic shock and Quincke's oedema. 6. Disorders of amino acid metabolism: the causes, pathogenesis and symptoms of phenylketonuria and alkaptonuria; disorders of fat metabolism: lipid metabolism (exogenous and endogenous), the types of lipoproteins, atherosclerosis – risk factors, mechanism of formation, symptoms, consequences, the types of atherosclerotic plaques and their characteristics; disorders of carbohydrate metabolism: glucose metabolism, diabetes – definition, diagnostic criteria, the types of diabetes and their pathomechanism, symptoms, acute complications (ketoacidosis) and chronic complications (angiopathies, neuropathies). 7. Pathophysiology of the heart: cardiac arrhythmias - the pathophysiology of arrhythmias, disorders of impulse formation and conduction, brady- and tachyarrhythmias, the clinical types of arrhythmias, the consequences of arrhythmias; selected valvular heart defects (mitral valve defects, aortic valve defects) – causes,		

					pathomechanism and development of the changes, clinical symptoms and consequences. 8. Pathophysiology of the respiratory system: pulmonary hypertension (primary and secondary): causes, pathogenesis, clinical symptoms; cystic fibrosis – causes, pathomechanism, forms and clinical symptoms; tuberculosis – causes and risk factors, the development of the changes – pathomechanism, the forms of the disease, clinical symptoms; sarcoidosis – causes, pathogenesis, stages and clinical symptoms; cancers of the lung and pleura – causes, forms, clinical symptoms; interstitial lung diseases; 9. Pain: Nociception, the conduction, perception and modulation of pain. Pain and sensory disturbances: concepts, aetiopathogenesis, classification, clinical symptoms; acute and chronic pain; the pathomechanism of receptor and neuropathic pain; the body's response to pain. Pain syndromes. Pain assessment scales. Headaches – causes, pathomechanism, characteristics, accompanying symptoms. 10. The pathology of inflammatory diseases of the nervous system and of diseases of the neuromuscular junction – causes, pathomechanism, clinical symptoms. 11. The pathology of cancers: definitions, the features of cancer cells; the pathophysiology of the carcinogenesis process (the role of genes), the stages of tumour development, the symptomatology of cancers; tumour markers; paraneoplastic syndromes; the pathophysiological basis of cancer treatment. 12. The pathology of the blood and the haematopoietic system: causes, risk factors, pathomechanism and symptoms: anaemias, polycythaemia vera and pseudopolycythaemia, acute leukaemias, chronic myeloproliferative disorders (chronic myeloid leukaemia), lymphoproliferative syndromes (chronic lymphocytic leukaemia, lymphomas); haemorrhagic diatheses – coagulopathies (haemorrhagic diatheses of plasma origin, congenital and acquired, disseminated intravascular coagulation (DIC), fibrinolysis disorders), thrombocytopenias, vascular haemorrhagic diatheses, thrombosis. 13. Pathology of the digestive system: causes, pathomechanism, clinical symptoms: GERD;		

					peptic ulcer disease of the stomach and duodenum; inflammatory bowel diseases: IBS, colorectal cancer; liver diseases: viral hepatitis, liver cirrhosis.		
49.	PRE-MEDICAL FIRST AID	W01	U02	K01, K02	Lectures: Basic terms, objectives, scope and legal aspects of providing first aid. 2. Recognising sudden cardiac arrest, principles of conducting cardiopulmonary resuscitation. 3. Principles of using automated external defibrillators (AED). 4. The Public Access to Defibrillation (PAD) Programme. 5. First aid in various situations (fainting, nosebleed, epilepsy, hypoglycaemia, hyperglycaemia, shock, stroke, myocardial infarction). 6. Road accidents – epidemiology and general principles of conduct at the scene of an accident.	ZAO	Multiple-choice test. Activity in classes, group work / graded credit

					Classes: Safety of oneself, the patient and the scene of the incident, initial ABCD assessment of the patient: Applying safety principles while providing first aid Technique of clearing the airways using the manual method – head tilt backwards and chin (jaw) lift Technique of assessing breathing using the "look, listen and feel" method Method of assessing consciousness in adults, children, infants and newborns 2. Unconscious patient – first aid: Recognising a sudden threat to health or life Determining the level of consciousness Principles of providing first aid in fainting, hypo-/hyperglycaemia, a seizure, heatstroke, suspected acute coronary syndrome Principles and technique of providing first aid in burns: thermal, chemical, sunburn, electrical, lightning Principles and techniques of providing first aid in hypothermia and frostbite Principles of providing first aid in selected poisonings Principles and technique of placing the patient in the recovery (lateral) position 3. Basic cardiopulmonary resuscitation procedures: Principles and techniques of conducting cardiopulmonary resuscitation according to the BLS scheme in adults and children Principles and technique of conducting cardiopulmonary resuscitation according to the BLS scheme in a pregnant woman Principles of using an automated external defibrillator (AED) in adults and children Principles and technique of providing first aid in choking in an adult, a child and an infant Principles and technique of cardiopulmonary resuscitation according to the BLS scheme in a drowning person 4. Initial assessment, initial trauma assessment according to ITLS, local examination, first aid in mechanical injuries and injuries of various body regions: Technique of manual stabilisation of the cervical spine Placing the casualty in the position in which they were found		

					Technique of immobilising limbs in fractures, dislocations and sprains, traumatic amputations Technique of applying a protective dressing to various body regions (limbs, head, abdominal wall), application of a pressure dressing and a tourniquet Technique of stabilising a foreign body in a wound (a foreign body lodged in the abdominal wall, the chest)		

50.	PHYSIOTHERAPY PLANNING (Physiotherapy planning in locomotor system dysfunctions. Physiotherapy planning in internal diseases. Physiotherapy planning in the developmental age.)	W01 – W03	U01, U02	K01 – K03	Lectures: Programming of physiotherapy in locomotor system dysfunctions in the course of orthopaedic conditions and in traumatology. Programming of physiotherapy in neurological diseases and neurosurgical procedures. 2. Programming of physiotherapy in rheumatological diseases, sports medicine. Setting physiotherapy objectives depending on the patient's functional status and needs. 3. Selection of physiotherapeutic procedures taking into account their type, frequency, parameters and therapeutic area depending on the patient's clinical status, age, existing disorders and the indications and contraindications for the procedures. 4. Adapting medical devices where necessary. Documenting the physiotherapy planning process. Programming of physiotherapy in internal diseases in the course of cardiological conditions and after cardiac surgery procedures. 2. Programming of physiotherapy in diseases in surgery, pulmonology, gynaecology and obstetrics, paediatrics, geriatrics, psychiatry. 3. Programming of physiotherapy in oncological diseases and palliative medicine. 4. Setting physiotherapy objectives depending on the patient's functional status and needs. 5. Selection of physiotherapeutic procedures taking into account their type, frequency, parameters and therapeutic area depending on the patient's clinical status, age, existing disorders and the indications and contraindications for the procedures. 6. Adapting medical devices where necessary 7. Documenting the physiotherapy planning process. Programming of physiotherapy in the developmental age in the course of neurological and locomotor system diseases. 2. Setting physiotherapy objectives depending on the patient's functional status and needs. 3. Selection of physiotherapeutic procedures taking into account their type, frequency, parameters and therapeutic area depending on the patient's clinical status, age, existing disorders and the indications and contraindications for the procedures. 4. Adapting medical devices where necessary. 5. Documenting the physiotherapy planning process	EGZ	The arithmetic mean of the grades from the tests Examination Independent work of the student during classes (engagement in performing tasks, drawing conclusions, presentation of results) Practical task – independent development of a topic, demonstration. Independent work of the student in classes (engagement in performing tasks, drawing conclusions, presentation of results), work in simulated and clinical conditions Observation of the student during classes

					Classes: Analysis of clinical cases – planning physiotherapeutic management appropriately to the conditions/dysfunctions		
51.	FUNDAMENTALS OF STATISTICS IN SCIENTIFIC RESEARCH	W01	U01, U02	K01	Classes: The role and tasks of statistics in medical research. 2. Acquisition, coding and classification of medical data. 3. Examples of applications of statistics in processing the results of research in the field of physiotherapy. 4. Calculating indicators of structure, intensity, illustrativeness, measures of central tendency and measures of dispersion in medical applications using a spreadsheet. 3. Analysis of the relationship between quantitative features. Simple regression. Interpretation and presentation of the obtained analysis results. 5. Analysis of the relationship between quantitative and qualitative features. Parametric tests, e.g. Student's t-test, and non-parametric tests, e.g. the Mann-Whitney test. 7. Comparison of the results of dependent variables. Student's t-test for dependent variables and the Wilcoxon test. 8. Comparison of two or more independent groups. Analysis of variance. The median test and the Kruskal-Wallis test. 9. A sample analysis of research results needed for writing the diploma thesis.	ZAO	Performing exercises / instructions / tasks for statistical processing in practical classes Passing the test
52.	PAIN AND OEDEMA THERAPY	W01, W02	U01 – U03	K01, K02	1. Lectures: Pain as a medical and socio-economic issue. 2. Psychological factors and the perception of pain. Pain treatment within the healthcare system in Poland. 3. Clinical assessment of a patient with chronic pain. Medical history, physical examination, clinical pain measurement, pain assessment scales. 4. Non-pharmacological methods and therapies in pain treatment. 5. Pain treatment in old age - limitations - possibilities of effective therapy - the risk of adverse effects and interactions. 6. Introduction to the concept of MLD. 7. Anatomy and physiology of the	ZAO	A test comprising 30 questions on the topics covered by the programme. Preparation and delivery of therapy for individuals with acute and chronic pain and with lymphoedema, taking into account the patient's possibilities and limitations.

					lymphatic system. 8. Aetiology of lymphoedema. 9. Diagnostics of lymphoedema and the planning of physiotherapeutic management. 10. Treatment of post-operative scars. 11. The essence of CDT (MLD, bandaging, Kinesio Taping, complications). Principles of hygiene and skin care in the area affected by oedema. Classes: 1. Theory. 2. Learning the basic grips and techniques of MLD. 3. MLD of the upper limb. 4. Multilayer bandaging of the upper limb. 5. MLD of the lower limb. 6. Multilayer bandaging of the lower limb. 7. MLD of the chest. 8. MLD of the abdomen. 9. MLD of the head and neck. 10. Treatment of post-operative scars in female patients after mastectomy.		

53.	ASSISTANT PLACEMENT	W01 – W04	U01 - U03	K01	Professional placement: 1. Becoming acquainted with the organisation and the principles of operation of a facility providing services in the field of rehabilitation and physiotherapy. 2. Familiarisation with the specifics of the physiotherapist's work, based on the Act on the Profession of Physiotherapist, the code of professional ethics of the physiotherapist and patients' rights. 3. The self-government of physiotherapists, its structure and tasks. 4. Familiarisation with the most common health and functional problems with which patients present to the facility. Assisting in the delivery of physiotherapeutic procedures and nursing care procedures. 6. Familiarisation with the facilities and resources used in the delivery of physiotherapeutic services. 7. Learning the principles of establishing direct contact with patients. 8. Learning the principles of establishing contact with members of the therapeutic team.		Assessed by the placement supervisor at the healthcare entity and approved by the placement supervisor on behalf of the University. The condition for obtaining the final credit for the professional placement is the achievement of all of the above-mentioned learning outcomes and obtaining a positive assessment of an essay on the issues of patients undergoing physiotherapy during the student's completion of the professional placement, with reference to the individual learning outcomes in the area of knowledge, and the attachment of the essay to the course on the e-learning platform.
54.	PLACEMENT IN CLINICAL PHYSIOTHERAPY, PHYSICAL THERAPY AND MASSAGE	W01 – W03	U01 - U05	K01	Familiarising students with the therapeutic team and its tasks, as well as with the layout and work organisation of the facility. Familiarisation with the apparatus and equipment of the place where the	ZAO	Assessed by the placement supervisor at the healthcare entity and approved by

					placement is carried out and with the principles of BHP. 2. Familiarising students with the therapeutic team and its tasks. 3. Analysis of the indications and contraindications for procedures in the field of physical therapy and massage, taking into account the patient's clinical condition. 4. Observation of and participation in carrying out the diagnostics and physiotherapeutic assessment of clinical patients for the purposes of physiotherapy. 5. Familiarising students with the types of medical documentation of patients treated in clinical settings. 6. Improving physiotherapeutic skills in the process of treating clinically treated patients. 7. Performing procedures: massage and physical procedures using the available medical apparatus, in accordance with prescriptions and referrals, under the supervision of the supervisor. 8. Cooperation with the therapeutic team.		the placement supervisor on behalf of the University. The condition for obtaining the final credit for the professional placement is the achievement of all of the above-mentioned learning outcomes and obtaining a positive assessment of an essay on the issues of patients undergoing physiotherapy during the student's completion of the professional placement, with reference to the individual learning outcomes in the area of knowledge, and the attachment of the essay to the course on the e-learning platform.
55.	PLACEMENT IN CLINICAL PHYSIOTHERAPY, PHYSICAL THERAPY AND MASSAGE - SEMESTER PLACEMENT (DURING THE TENTH SEMESTER)	W01 – W06	U01 - U05	K01, K02	Familiarising students with the therapeutic team and its tasks, as well as with the layout and work organisation of the facility. Familiarisation with the apparatus and equipment of the place where the placement is carried out and with the principles of BHP. 2. Observation of and participation in carrying out the diagnostics and physiotherapeutic assessment of clinical patients for the purposes of physiotherapy. 3. Analysis of the indications and contraindications for procedures in the field of physical therapy and massage, taking into account the patient's clinical condition. 4. Participation in planning, and the planning of, the physiotherapy programme for clinical patients under the supervision of the placement supervisor. 5. Acquiring the ability to correctly select orthopaedic supplies and medical devices according to the patient's needs. 6. Participation in the delivery of the physiotherapy process for clinical patients. 7. Performing procedures: massage and physical procedures using the available medical apparatus, in accordance with prescriptions and referrals, under the supervision of the supervisor.	ZAO	Assessed by the placement supervisor at the healthcare entity and approved by the placement supervisor on behalf of the University. The condition for obtaining the final credit for the professional placement is the achievement of all of the above-mentioned learning outcomes and obtaining a positive assessment of an essay on the issues of patients undergoing physiotherapy during the student's completion of the professional placement, with reference to the individual learning outcomes in the area of knowledge, and the attachment of the essay to the course on the e-learning platform.

					8. Principles of carrying out physioprophylaxis, taking into account the patient's needs and clinical condition.		
56.	SUMMER PLACEMENT IN KINESIOTHERAPY	W01 – W03	U01 – U04	K01	Becoming acquainted with the organisation of the unit / facility / ward providing services in the field of kinesiotherapy. 2. Familiarisation with the apparatus and equipment of the place where the placement is carried out and with the principles of BHP. 3. Analysis of the indications and contraindications for procedures in the field of kinesiotherapy. 4. Familiarisation with medical documentation for the purposes of the kinesiotherapy process. 5. Participation in conducting the examination of the patient for the purposes of kinesiotherapy (static and dynamic examinations, as well as general and local ones). 6. Participation in performing exercises in accordance with the systematics of kinesiotherapy. 7. Participation in the selection of appropriate equipment for performing kinesiotherapeutic exercises and in the correct organisation of the workstation for carrying out the exercises. 8. Independent performance of kinesiotherapy procedures in accordance with their methodology, under the supervision of the placement supervisor at the facility. 9. Improving the skills of working in a therapeutic team and working with the patient.	ZAO	Assessed by the placement supervisor at the healthcare entity and approved by the placement supervisor on behalf of the University. The condition for obtaining the final credit for the professional placement is the achievement of all of the above-mentioned learning outcomes and obtaining a positive assessment of an essay on the issues of patients undergoing physiotherapy during the student's completion of the professional placement, with reference to the individual learning outcomes in the area of knowledge, and the attachment of the essay to the course on the e-learning platform.
57.	PLACEMENT IN CLINICAL PHYSIOTHERAPY, PHYSICAL THERAPY AND MASSAGE (NO EARLIER THAN DURING THE FIFTH SEMESTER)	W01 -W05	U01 – U04	K01	Familiarising students with the therapeutic team and its tasks, as well as with the layout and work organisation of the facility. Familiarisation with the apparatus and equipment of the place where the placement is carried out and with the principles of BHP. 2. Familiarising students with the therapeutic team and its tasks. 3. Analysis of the indications and contraindications for procedures in the field of physical therapy and massage, taking into account the patient's clinical condition. 4. Observation of and participation in carrying out the diagnostics and physiotherapeutic assessment	ZAO	Assessed by the placement supervisor at the healthcare entity and approved by the placement supervisor on behalf of the University. The condition for obtaining the final credit for the professional placement is the achievement of all of the above-mentioned learning outcomes and obtaining a positive assessment of an essay on the issues of patients undergoing physiotherapy during the student's completion of the professional

					of clinical patients for the purposes of physiotherapy. 5. Acquiring the ability to correctly apply orthopaedic supplies and medical devices according to the patient's needs. 6. Participation in the delivery of the physiotherapy process for clinical patients. 7. Performing procedures: massage and physical procedures using the available medical apparatus, in accordance with prescriptions and referrals, under the supervision of the supervisor. 8. Cooperation with the therapeutic team.		placement, with reference to the individual learning outcomes in the area of knowledge, and the attachment of the essay to the course on the e-learning platform.
58.	PROFILED SUMMER PLACEMENT - ELECTIVE (NO EARLIER THAN AFTER THE EIGHTH SEMESTER)	W01 – W03	U01 – U04	K01	Familiarising students with the therapeutic team and its tasks, as well as with the layout and work organisation of the facility. Familiarisation with the apparatus and equipment of the place where the placement is carried out and with the principles of BHP. 2. Familiarising students with the types of medical documentation of patients, with particular emphasis on physiotherapeutic documentation. 3. Participation in maintaining physiotherapeutic documentation, cooperation with the therapeutic team. 4. Observation of and participation in carrying out the diagnostics and physiotherapeutic assessment of patients for the purposes of physiotherapy. 5. Improving acquired skills and acquiring new physiotherapeutic skills in the process of treating patients with various disease entities. 6. Independent performance of procedures in the field of physiotherapy, manual therapy and special methods in accordance with their methodology, under the supervision of the placement supervisor at the facility. 7. Participation in carrying out physioprophylaxis activities in various disease entities. 8. Observation of physiotherapeutic management in patients;	ZAO	Assessed by the placement supervisor at the healthcare entity and approved by the placement supervisor on behalf of the University. The condition for obtaining the final credit for the professional placement is the achievement of all of the above-mentioned learning outcomes and obtaining a positive assessment of an essay on the issues of patients undergoing physiotherapy during the student's completion of the professional placement, with reference to the individual learning outcomes in the area of knowledge, and the attachment of the essay to the course on the e-learning platform.
59.	PROFILED SUMMER PLACEMENT - ELECTIVE (NOT EARLIER THAN AFTER THE SIXTH SEMESTER)	W01 – W03	U01 – U04	K01	Familiarising students with the therapeutic team and its tasks, as well as with the layout and work organisation of the facility. Familiarisation with the apparatus and equipment of the place where the placement is carried out and with the principles of BHP. 2. Familiarising students with the types of medical documentation of patients, with particular emphasis on physiotherapeutic documentation.	ZAO	Assessed by the placement supervisor at the healthcare entity and approved by the placement supervisor on behalf of the University. The condition for obtaining the final credit for the professional placement is the achievement of all of the above-

					3. Observation of and participation in conducting the diagnostics and physiotherapeutic assessment of patients for the purposes of physiotherapy. 4. Improving acquired skills and acquiring new physiotherapeutic skills in the process of treating patients with various disease entities. 5. Applying various activities in the scope of adapted physical activity. 6. Independently performing procedures in the scope of physiotherapy and manual therapy in accordance with their methodology under the supervision of the placement supervisor at the institution. 7. Observation of physiotherapeutic management in patients;		mentioned learning outcomes and obtaining a positive assessment of an essay on the issues of patients undergoing physiotherapy during the student's completion of the professional placement, with reference to the individual learning outcomes in the area of knowledge, and the attachment of the essay to the course on the e-learning platform.
60.	PSYCHOLOGY IN SPORT	W01 – W06	U01 – U03	K01 – K03	Lectures: 1. Introduction to mental training in sport 2. Mental training worldwide and in Poland. The aim, subject, directions, theories, diagnostic and monitoring tools, methodology and ethics of mental training. 3. Rehabilitation psychology with elements of clinical psychology in sport 4. Concepts of supporting the athlete in situations of injury and physical trauma and rehabilitation. 5. Psychological and psycho-organic disorders in sport.	ZAO	Activity and a positive attitude during classes. Observation during classes. Preparation of proposed therapeutic solutions - presentation

					Classes: Pre-, post- and pre-competition states in sport. Emotions in sport. 2. Shaping the Integral Attitude of Optimal Competition Readiness (IPOGS). 3. Individual differences, personality tendencies and preferences. 4. Psychoregulation and crisis intervention. Thought engineering and cognitive training. Mindset and attributional style. 5. Neuropsychology and psychomotor skills in sport: diagnostics, monitoring, training. 6. Neurodiagnostics and neurotraining in sport: EEG Biofeedback. 7. Group processes and building a sports team 8. Phases of team building. Interpersonal communication, building proper relationships, conflict resolution, sociometry in a sports team. 9. Mental training in competitive sport. 10. Types of motivation. Shaping intrinsic motivation for sport in the 7W model. 11. Bodywork 12. Psychodietetics. Addiction in sport. 13. Developmental psychology of children and adolescents in relation to the stages of a sports career 14. The GEES dual-career model of the athlete. Tools for supporting the athlete in their dual career. 15. Stress in sport. Styles and strategies for coping with stress.		

61.	REHABILITATION OF COGNITIVE PROCESSES WITH THE USE OF INFORMATION TECHNOLOGY SYSTEMS	W01, W02	U01, U02	K01, K02	Lectures: Information on the structure and functioning of the brain in the context of the methods applied. 2. The application of feedback in therapy. 3. Types of physiological measurements. 4. Issues concerning the characteristics of the EEG signal. 5. Issues in the scope of electroencephalography. Types of brain waves and their characteristics. 6. Review of research on the neurofeedback method. 7. The effectiveness of the neurofeedback method in selected disorders. Classic "training protocols". 8. EEG Biofeedback in the diagnosis and therapy of dyslexia and ADHD. 9. Principles of conducting occupational therapy (rehabilitation) using the EEG Biofeedback method. 10. Aphasiology as a branch of neurologopaedics 11. Criteria for selecting diagnostic tools and supporting materials in the therapy of persons with aphasia 12. Principles of differential diagnosis of language disorders in persons with brain damage 13. Afasystem - the application of a set of computer programs supporting the rehabilitation of patients with aphasia 14. CogniPlus - Application in the rehabilitation of cognitive functions Classes: Discussion of measurement techniques (EEG, EMG, EDA, HRV) 2. Outline of the anatomy of the central and autonomic nervous system. 3. Biofeedback examination protocols. Relaxation techniques. 4. Fundamentals of neurofeedback. 5. The application of EMG for biofeedback. 6. The application of HRV for biofeedback. 7. The application of EDA for biofeedback 8. The application of eye-tracking for biofeedback. 9. As part of the seminar, practical exercises will also be conducted using apparatus for EEG Biofeedback therapy 10. Electrooculography 11. Measurement of human body impedance 12. EKG 13. Spirometry and breath examination 14. Blood pressure measurement and pulse oximetry 15. Recording of human movement 16. Eye-tracking 17. Cogni Plus, Afasystem	ZAO	Completion in the form of a written assignment. Activity and a positive attitude during classes. Preparation of a presentation on the possibility of using medical teleinformatic systems

62.	DIPLOMA SEMINAR AND DIPLOMA EXAMINATION	W01 – W05	U01 – U10	K01 - K04	Seminars: Regulations, principles of diploma awarding. 2. The aim of the diploma thesis, the aim of scientific research 3. The current state of practice in the areas of professional activity and of the physiotherapist's professional labour market 4. The current state of the application of knowledge from the disciplines of health sciences and medical sciences in physiotherapy, standards and principles, directions of development 5. The methodology of writing scientific papers 6. The methodology of scientific research 7. Selection of the thesis topic 8. Literature analysis 9. Preparation and selection of the study group/literature for analysis 10. Gathering information 11. Editing the thesis in accordance with the guidelines 12. Cooperation with the supervisor, the study group, and the therapeutic team 13. Discussion of the course of the diploma examination	EGZ	Assessment of activity, assessment of the oral presentation of the research problem at the individual stages of preparing the thesis, Assessment of progress in terms of: the degree of advancement in preparing the Master's thesis, the degree of advancement in preparing the research model, preparations for the possibility of conducting empirical research, Assessment of the diploma thesis, Examination questions, diploma examination

63.	SOCIO-HUMANISTIC BASIC - General sociology and sociology of disability, General psychology, General and special pedagogy, Philosophy and Bioethics	W01 – W06	U01 – U03	K01, K02	Psychology as a science and psychological concepts of the human being 2. Social perception and social cognition 3. Basic cognitive processes: Memory, Thinking and problem solving 4. Selected aspects of group functioning 5. Interpersonal communication 6. Psychology of individual differences 7. Issues of the stages of human development 8. Foundations of philosophy as the love of wisdom 9. Foundations of ethics 10. Selected issues in professional ethics 11. Review of bioethics issues Introduction to sociology, basic concepts, the role of sociology in healthcare. 2. The sociological approach to disability from the perspective of various theories and concepts. The concepts of health, illness and disability from a sociological perspective (the medical, social, biopsychosocial and human-rights models). 3. Contemporary statistics on disability at the national and global scale. Stereotypes, prejudice, the concepts of stigmatization and discrimination. 4. Social attitudes towards persons with disabilities. Stigmatization and discrimination of patients with locomotor system disabilities using examples. The role of the media in shaping social attitudes towards persons with disabilities. Health-related quality of life of persons with disabilities, conditioned by their state of health. 5. Definitions and dimensions of quality of life, the socio-cultural determinants of adaptation to a new life situation conditioned by disability or medical intervention. 6. The role of the family connected with the caregiving function for a sick family member, the consequences of fulfilling the role of a home caregiver (hospital at home). 7. The sociological diagnosis of the main social challenges in the field of disability. Social participation and the movement for the rights of persons with disabilities. The subject matter and place of pedagogy in the system of sciences. 2. Branches of contemporary pedagogy. Pedagogy as the science of upbringing. Methods, attitudes and styles of upbringing. Branches of special	ZAO	1. Credit test in the form of a written test covering course units A-D 2. Work in groups, development of the stages of the physiotherapist's work in a selected approach - Student activity in classes

					pedagogy. The process of rehabilitation (revalidation) of persons with motor and sensory disabilities. 3. Pedagogical activity and its stages in the work of a physiotherapist. Didactic and educational influences in various age groups. 4. Therapeutic and educational activities supporting the rehabilitation (revalidation) process of persons with disabilities.		
64.	SPORT FOR PERSONS WITH DISABILITIES	W01 – W05	U01 – U04	K01, K02	Lectures: History of sport for persons with disabilities in Poland and worldwide. 2. Introduction - the definition of disability and the issues associated with it (in Poland and worldwide). 3. The functional capabilities of persons with disabilities divided into groups. The role and place of sport in the life of persons with various types of disabilities 4. Sports training of persons with disabilities. General principles of sports training. Various types of sports disciplines for persons with disabilities, including disciplines from the Paralympic Games, the Olympics	ZAO	written test with closed single-choice questions practical credit active participation in classes - observation during classes

					5. for the Deaf (Deaflympics) and the Special Olympics 6. The course and organization of sports competitions for persons with disabilities. 7. Regulations, announcements, competition programmes. The division of athletes with disabilities into groups and classes. 8. Annual training plan for selected sports disciplines. 9. Review of non-governmental foundations supporting sports for persons with disabilities in Poland. 10. Barriers in the life of a person with a disability. The social model of disability. 11. Equal rights in sport. 12. Doping and the risks associated with it in sport for persons with disabilities. 13. Problems with the sports classification of persons with disabilities - International Classification of Functioning (ICF). 14. Education and training of persons with disabilities in various sports disciplines. 15. The risk of injuries in sport for persons with disabilities		

					Classes: Organizational class. BHP rules concerning sports activities in the gymnasium. Discussion of self-study: - preparation of annual training plans for a selected sports discipline of persons with disabilities. 2. Wheelchair driving - rules of moving in a wheelchair and practical exercises 3. Goalball - theoretical assumptions, rules of the game and motor preparation, training and practice. Sitting volleyball - theoretical assumptions, rules of the game and motor preparation, training and practice. 5. Wheelchair basketball - theoretical assumptions, rules of the game and motor preparation, training and practice. 6. Boccia - theoretical assumptions, rules of the game and motor preparation, training and practice. 7. Wheelchair rugby - theoretical assumptions, rules of the game and motor preparation, training and practice. 8. Discussion of the annual training plans prepared by the students.		
					Lectures: 1. Definition, causes and physiology of stress.		

65.	STRATEGIES AND METHODS OF COPING WITH STRESS IN THE WORK OF A PHYSIOTHERAPIST	W01 – W03	U01	K01	2. Psychosocial factors in the work of medical personnel and the risk of committing a medical error. 3. Types of medical errors 4. The impact of the SARS-COV2 virus pandemic on the mental health of medical personnel 5. Analyses of, countermeasures against and coping with the negative impact of psychosocial factors occurring in the healthcare work environment 6. Techniques for reducing anxiety and methods of relaxation Classes: Analysis of clinical cases - problem-based solutions	ZAO	Activity in classes, Written assignment - description of a method of coping with stress.
66.	TECHNIQUES OF MENTAL WORK	W01 – W03	U01 – U03	K01, K02	Lectures: 1. The brain in the learning process. 2. Principles of effective mental work. 3. Effective management of study time and goals - stimulating self-motivation. 4. The role of shaping and consolidating high self-esteem within oneself. 5. The negative role of stress in the learning process and methods of relaxation. 6. Channels and preferred sensory systems. Types, areas and zones of intelligence. Learning strategies. 7. Memory. Super-memory training using mnemonic techniques. 8. Speed reading. 9. Methodology of subject-specific processing of knowledge derived from various sources. 10. Principles of creating effective notes. 11. Traditional and electronic knowledge resources and their use in intellectual work. 12. Final credit test. Preparation of a thematic bibliographic compilation based on the traditional and electronic knowledge resources of the WSEI Scientific Information Centre. Credit. Class: Analysis of cases and therapeutic options	ZAO	Preparation of a thematic bibliographic compilation based on the traditional and electronic knowledge resources of the WSEI Scientific Information Centre.
67.	MANUAL THERAPY	W01 – W03	U01 – U04	K01, K02	Lectures: 1. Introduction to manual therapy: historical outline, the development of manual therapy methods in Poland and worldwide. 2. Basic concepts in manual therapy 3. General and specific manual examination	EGZ	Test

					4. Principles of applying manual therapy: indications and contraindications 5. Familiarization with the techniques used in manual therapy and the ways of performing them 6. Analysis of differences and the application of manual techniques in various body regions. Analysis and application of manual techniques on joints, ligaments, muscles, fasciae and skin. 7. Neuromobilizations. Objectives, performance methodology. Indications and contraindications. 8. The application of manual therapy in soft tissue work. Classes: 1. Manual diagnostics. Differentiation of pain complaints. Examination of joint play. Static muscular balance and imbalance. Theoretical and practical analysis. 2. Techniques in manual therapy: mobilizations, manipulations, tractions. 3. Principles of applying particular manual techniques. 4. Practical application of manual therapy in clinical syndromes of the spine: cervical, thoracic and lumbosacral. 5. Practical application of manual therapy of the lower limb joints: hip, knee, ankle. 6. Practical application of manual therapy of the upper limb joints: shoulder, elbow, wrist. 7. Examination and neuromobilization of the peripheral nerves of the upper limb (ulnar, radial, median nerve) 8. Examination and neuromobilization of the peripheral nerves of the lower limb (sciatic, peroneal and tibial nerve) 9. Application of functional massage of selected soft tissues within the upper limb, lower limb and trunk)		Practical credit. Preparation of documentation of the course of manual therapy Observation of the student during classes.
68.	PHYSICAL EDUCATION	W01 – W02	U01	K01	Classes: 1. Overview of health and safety rules during physical education class. Familiarizing the students with the educational content and the rules of obtaining credit. Acquainting the students with the sports hall and gym regulations. 2. General fitness exercises for keeping people in a good shape. 3. Getting familiar with the rules of football, volleyball and basketball – their technical	ZAO	Observation of the student's work. Preparation and conduct of warm-up and stretching exercises.

					elements and tactics as well as refereeing rules. 4. Presentation of body shaping forms in aerobics exercises, with the use of a variety of equipment/accessories, i.e. skipping ropes, gymnastics tapes, dumbbells, balls, shapers, gymnastics benches. 5. Understanding the principles of stretching and callanetics as an effective method of muscle stretching and shaping. 6. Using different forms of physical activity for body shaping. 7. Importance of microelements and macroelements for the proper functioning of the organism during aerobic workout and leisure activities. 8. Presenting and familiarizing the students with various forms of circuit training and training including stations. 9. Overview of physical activity at different stages of human development, significance of fitness in the ageing process. 10. Presentation of various forms of physical activity with and without music: Fitness, Aerobics, Pilates, Body Shape, Aeroboxing – and their impact on shaping particular muscle groups. 11. Technique of doing exercise at different speeds, selection of appropriate loads per particular muscle groups, discussion on the role of active rest and physical fitness for the quality of daily life and work. 12. Exercises, e.g. for shoulder girdle and pelvic girdle, or for abdomen and back as a form to enhance postural muscles. 13. Discussion on the significance of concentration and respiration in physical exercises on the cardiovascular and respiratory systems. 14. Using a medical ball for various forms to reinforce the shoulder girdle, e.g. abdomen and back, squats and semi-squats jumps, taking 'WZ and 'S' position. 15. Summary, discussion and assessment of physical fitness.		
69.		W01 – W04	U01 – U03	K01	Lectures: 1. Knowledge of the history of orthopaedic supplies.	ZAO	Student activity during classes

	MEDICAL DEVICES AND ORTHOPAEDIC SUPPLIES				2. Contemporary medical devices and orthopaedic supplies. (Classification and application) 3. Definition and their types. 4. Orthopaedic supplies for the upper limb. Most frequently occurring problems. 5. Orthopaedic supplies for the lower limb. Most frequently occurring problems. 6. The issue of orthoses used in the treatment of locomotor system disorders. Definition of an orthosis. Application of orthoses in particular disease entities". 7. Orthopaedic supplies for the upper and lower limb. 8. Orthopaedic application in the treatment of spinal diseases and injuries. 9. Orthopaedic supplies in sports physiotherapy. 10. Medical devices used in the treatment of locomotor system disorders. Definition of an orthosis. Application of orthoses in particular disease entities. 11. Entitlements to the use of orthopaedic equipment and supplies, procedures, legal regulations. Classes: The physiotherapist's competences in prescribing medical devices 2. Application of medical devices in various disease entities. 3. Types of prostheses and their application. Factors influencing the selection of an appropriate prosthesis. 4. Prostheses – principles of selection, method of fitting, types, action and application. 5. Orthoses – types, modes of action, presentation of orthopaedic equipment as an auxiliary aid in the rehabilitation of orthopaedic and trauma patients. 6. Learning the selection and use of selected medical devices		Single-choice test Practical credit for the selection of medical devices
70.	PERSONAL TRAINING AND MOTOR PREPARATION (elective (optional) module, sem. II – variant A; alternative to the module "Health Coaching and Habit Change"; delivered jointly with the field of study Sports Diagnostics and Coaching)	W01 – W05	U01 – U04	K01 – K02	Lectures: A. Diagnosis of needs and planning of individual training: – Diagnosis of needs: interview, training goals, qualification for exercise and contraindications. – Assessment of body posture, body composition and motor abilities – tools and tests. – Principles of planning and periodization of individual training. B. Methodology of personal training: –	ZAO	Graded credit (ZAO). W01–W05, U01–U04: project/programme (development of an individual plan/programme according to a topic proposed by the instructor) and a test/quiz verifying knowledge. U01–U04, K01–K02: practical task – independent performance/demonstration under simulated conditions; observation

					Methodology and structure of a personal training session. – Selection of exercises, volume, intensity and rest intervals. – Communication with the client, motivation and safety in the training room. C. Motor training and assessment of effects: – Motor abilities and methods of their development (strength, power, speed, endurance, coordination). – Motor preparation training – assumptions and means. – Monitoring and assessment of training effects; modification of the programme.		of the student during classes; assessment of activity and engagement.
					Classes (laboratory): A. Diagnosis of needs and planning of individual training: – Interview and physical activity readiness questionnaire (PAR-Q). – Anthropometric measurements, body composition assessment and fitness tests (e.g. FMS, strength and endurance tests). – Development of an individual training plan based on the diagnosis. B. Methodology of personal training: – Instruction and teaching of the technique of basic movement patterns (squat, hip-hinge, push, pull). – Conducting a training session with spotting and technique correction. – Selection and progression of loads in strength, endurance and mobility training. C. Motor training and assessment of effects: – Delivery of classes aimed at developing selected motor abilities. – Tests assessing the effects (strength, power, endurance) and interpretation of the results. – Modification of the training plan based on the obtained results.		
71.	HEALTH COACHING AND HABIT CHANGE (elective (optional) module, sem. II – variant B; alternative to the module “Personal Training and Motor Preparation”; delivered jointly with the field of study Sports Diagnostics and Coaching)	W01 – W05	U01 – U04	K01 – K02	Lectures: A. Motivational communication and relationship building: – Fundamentals of interpersonal communication; verbal and non-verbal communication. – Motivational interviewing (MI) – the spirit of the method, principles and typical pitfalls. – Building relationships and trust; active listening, empathy, open-ended questions. B. Goal setting and progress monitoring: –	ZAO	Graded credit (ZAO). W01–W05, U01–U04: project/programme (development of an individual plan/programme according to a topic proposed by the instructor) and a test/quiz verifying knowledge. U01–U04, K01–K02: practical task – independent performance/demonstration under simulated conditions; observation

					Theories of motivation and stages of change (the transtheoretical model). – Goal setting (SMART), action planning and anticipating barriers. – Tools for monitoring progress (diaries, applications, indicators). C. Supporting the change of health habits: – The psychology of habit; mechanisms of habit formation and extinction. – Areas of change: physical activity, nutrition, sleep, coping with stress. – Barriers, relapses and strategies for preventing them; the role of social support.		of the student during classes; assessment of activity and engagement.
					Classes (laboratory): A. Motivational communication and relationship building: – Practising techniques of active listening, reflections and affirmations. – Conducting a motivational conversation (role-plays) and working with resistance and ambivalence. – Analysis of role-plays and provision of feedback. B. Goal setting and progress monitoring: – Formulating health goals together with the "client". – Development of an action plan and a progress monitoring system. – Progress review session and modification of goals. C. Supporting the change of health habits: – Project of a programme for changing a selected health habit. – Working with barriers and relapses (scenarios). – Presentation and evaluation of the coaching programme.		
72.	KINESIOTAPING AND FUNCTIONAL TAPING (elective (optional) module, sem. IV – variant A; alternative to the module "Medical and Functional Training"; delivered jointly with the field of study Sports Diagnostics and Coaching)	W01 – W05	U01 – U04	K01 – K02	Lectures: A. Theoretical foundations of kinesiotaping: – History and concept of kinesiotaping; properties of tapes. – Mechanisms of action (fascia, circulation, proprioception, pain modulation). – Indications and contraindications; principles of safety and hygiene. B. Tape application techniques: – Types of application: muscular, ligamentous-tendinous, corrective, fascial, lymphatic. – Principles of selecting tape tension and direction of application.	ZAO	Graded credit (ZAO). W01–W05, U01–U04: project/programme (development of an individual plan/programme according to a topic proposed by the instructor) and a test/quiz verifying knowledge. U01–U04, K01–K02: practical task – independent performance/demonstration under simulated conditions; observation

					– Algorithm for selecting the technique to the therapeutic/training objective. C. Taping in the prevention and support of physical activity: – Taping in the prevention of sports overloads. – Support of training and recovery; integration with the training plan. – Limitations of the method and situations requiring consultation with a specialist.		of the student during classes; assessment of activity and engagement.
					Classes (laboratory): A. Theoretical foundations of kinesiotaping: – Palpatory anatomy of selected body regions. – Assessment and preparation of the skin for application. – Basics of cutting and applying the tape (I, Y, X shapes, fan). B. Tape application techniques: – Applications to selected muscle groups and joints (shoulder girdle, spine, upper and lower limb). – Corrective and lymphatic applications. – Assessment of the application effect and possible correction. C. Taping in the prevention and support of physical activity: – Preventive applications for selected sports disciplines. – Applications supporting post-exercise recovery. – Developing a taping scheme for a case study.		
73.	MEDICAL AND FUNCTIONAL TRAINING (elective (optional) module, sem. IV – variant B; alternative to the module "Kinesiotaping and Functional Taping"; delivered jointly with the field of study Sports Diagnostics and Coaching)	W01 – W05	U01 – U04	K01 – K02	Lectures: A. Foundations of medical training: – Definition and assumptions of medical training; motor control. – The role of training in the prevention of locomotor system dysfunctions. – Safety, indications and contraindications. B. Functional exercises and stabilization: – Core stabilization and its functional significance. – Myofascial chains and functional patterns. – Methodology of teaching functional exercises. C. Programming and progression of loads: – Training variables (volume, intensity, frequency, progression). – Periodization and individualization of functional training. – Monitoring and assessment of effects.	ZAO	Graded credit (ZAO). W01–W05, U01–U04: project/programme (development of an individual plan/programme according to a topic proposed by the instructor) and a test/quiz verifying knowledge. U01–U04, K01–K02: practical task – independent performance/demonstration under simulated conditions; observation of the student during classes; assessment of activity and engagement.

					Classes (laboratory): A. Foundations of medical training: – Assessment of movement patterns (elements of functional tests). – Identification of deficits and asymmetries. – Basic corrective exercises. B. Functional exercises and stabilization: – Exercises for local and global stabilization. – Functional exercises in various planes of movement. – Sensorimotor training with equipment (bands, balls, unstable surfaces). C. Programming and progression of loads: – Construction of a functional training programme. – Progression and regression of exercises. – Assessment of effects and modification of the plan.		
74.	TRAINING AND PHYSICAL ACTIVITY IN THE AQUATIC ENVIRONMENT (elective (optional) module, sem. VI – variant A; alternative to the module "Massage and Manual Techniques in Sport and Recreation"; delivered jointly with the field of study Sports Diagnostics and Coaching)	W01 – W05	U01 – U04	K01 – K02	Lectures: A. Specificity of activity in the aquatic environment: – Physical properties of water (buoyancy, hydrostatic pressure, resistance, temperature). – Physiological responses of the body to immersion and exertion in water. – Benefits, limitations and safety principles. B. Exercises and training in water: – Methodology of exercises in water (aqua fitness, aqua aerobics). – Endurance and strength training in water; selection of intensity. – Equipment supporting training in water. C. Aquatic activity in recovery and prevention: – Water in post-exercise recovery and biological regeneration. – Aquatic activity in the prevention of overloads. – Applications for various groups of recipients.	ZAO	Graded credit (ZAO). W01–W05, U01–U04: project/programme (development of an individual plan/programme according to a topic proposed by the instructor) and a test/quiz verifying knowledge. U01–U04, K01–K02: practical task – independent performance/demonstration under simulated conditions; observation of the student during classes; assessment of activity and engagement.
					Classes (laboratory): A. Specificity of activity in the aquatic environment: – Adaptation to the aquatic environment and assessment of comfort/safety. – Basic forms of movement and locomotion in water. – Assessment of the body's response to exertion in water. B. Exercises and training in water: – Conducting aqua-type classes. – Exercises with equipment		

					(pool noodles, water dumbbells). – Interval training in water. C. Aquatic activity in recovery and prevention: – Recovery sessions in water. – Preventive exercises in the aquatic environment. – Developing an aquatic activity programme for a selected group.		
75.	MASSAGE AND MANUAL TECHNIQUES IN SPORT AND RECREATION (elective (optional) module, sem. VI – variant B; alternative to the module "Training and Physical Activity in the Aquatic Environment"; delivered jointly with the field of study Sports Diagnostics and Coaching)	W01 – W05	U01 – U04	K01 – K02	Lectures: A. Foundations of relaxation massage: – Theoretical foundations of massage; physiological effects of its action. – Indications and contraindications; principles and hygiene of work. – Lubricants and preparation of the workstation. B. Sports massage and soft tissue techniques: – Sports massage: pre-start, inter-start and post-exercise. – Soft tissue techniques (myofascial release, treatment of trigger points). – Integration of massage with the training process. C. Self-massage and recovery tools: – Self-massage and foam rolling – basics. – Recovery tools (rollers, balls, massagers, IASTM tools). – Principles and safety of use.	ZAO	Graded credit (ZAO). W01–W05, U01–U04: project/programme (development of an individual plan/programme according to a topic proposed by the instructor) and a test/quiz verifying knowledge. U01–U04, K01–K02: practical task – independent performance/demonstration under simulated conditions; observation of the student during classes; assessment of activity and engagement.
					Classes (laboratory): A. Foundations of relaxation massage: – Positioning of the patient. – Basic techniques (effleurage, rubbing, kneading, tapotement, vibration). – Relaxation massage of the back and neck. B. Sports massage and soft tissue techniques: – Sports massage of the lower and upper limbs and the back. – Soft tissue techniques. – Treatment of trigger points. C. Self-massage and recovery tools: – Techniques of self-massage and rolling of the main muscle groups. – Self-massage instruction for the patient. – Developing an individual recovery scheme.		

Field of study Coordinator …… ……..
(name and surname) *(signature)*

Dean of the Faculty …….. ……..
(name and surname) *(signature*