

**FACULTY OF PHYSICAL EDUCATION AND SPORTS****Department of Health and Human Development****Study program: Balneophysiokinetotherapy and Rehabilitation****Level: Undergraduate****YEAR I**

Course code	Compulsory disciplines (Course)	Autumn semester / credits	Spring semester / credits
DF.01.01	Anatomy I	5	
DF.01.02	Biochemistry	3	
DF.01.03	Biophysics	4	
DS.01.04	Biomechanics	4	
DS.01.05	Kinetoprophyaxy	5	
DC.01.06	Medical informatics. Biostatistics	3	
DC.01.07	Behavioral sciences. Medical psychology. Medical Sociology	2	
DC.01.08	Physical education and sports	1	
DS.01.09	Practical skills	2	
DF.02.10	Anatomy II		3
DF.02.11	Physiology		5
DS.02.12	Health education and first aid		4
DS.02.13	Motor and somato-functional measurement and evaluation. Osteoarticular and muscular evaluation		5
DS.02.14	Hygiene		3
DS.02.15	Kynetotherapy		2
DC.02.16	English language		2
DC.02.17	Physical education and sports		1
DS.02.18	Practical skills		2
DS.02.19	Specialized medical practice		2
	Total	<b>29</b>	<b>29</b>

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DF.01.01**

III.2 Course: **Anatomy I**

III.3 Semester: **Autumn 1/ 1<sup>st</sup> semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **5**

III.6 The topic of the course

Objectives of the discipline include: knowledge of human body structures, their organization in systems and relationships, notions of osteology, myology, arthrology, morphology and structure of respiratory, cardiovascular, nervous, digestive, urogenital and endocrine systems. It is also important to know the elements of the descriptive anatomy of all parts of the locomotor apparatus and to apply the knowledge in the practice of kinetotherapy and medical rehabilitation. Practical works insist on studying regions and areas of the human body in axial segments (head, neck, trunk) or members in topographical anatomy. Morphological exploration is done on the corpse.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.01.02**

III.2 Course: **Biochemistry**

III.3 Semester: **Autumn 1/ 1<sup>st</sup> semester**

III.4 Number of hours weekly: **2**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

The objectives of the discipline include: knowledge assimilation of human biochemistry in order to understand the nature and mechanisms of the living world, to provide a basic preparation in the field of biochemistry, to describe some biochemical systems, structures, processes and phenomena, to translate the acquired information into practice with focus on human biochemistry. It is important to involve the students in practical laboratory activities in order to develop practical skills.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.01.03**

III.2 Course: **Biophysics**

III.3 Semester: **Autumn 1/ 1<sup>st</sup> semester**

III.4 Number of hours weekly: **3**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

Objectives of the discipline include: knowledge of phenomena, interactions and physical laws taking place on a macroscopic or microscopic scale, which have applications in balneophysiotherapy and rehabilitation, the application of the knowledge acquired in solving the concrete problems determined by the everyday reality, the acquisition of basic notions of basic biophysics to understand future specialized disciplines, as well as practical skills to measure and verify the physical phenomena studied at the course.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.01.04**

III.2 Course: **Biomechanics**

III.3 Semester: **Autumn 1/ 1<sup>st</sup> semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

The objectives of the discipline are: General principles of biomechanics, human body statics, bone morpho-functional characteristics, joint types, anatomy and functions of the main skeletal muscles, muscular biomechanics, muscular physiology, muscular strength, muscular performance and muscular fatigue of the human body with internal and external forces acting on the human body, as well as biomechanics of upper, lower limbs, walking, running, jumping, throwing, swimming and water sports.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.01.05**

III.2 Course: **Kinetoprophyllaxy**

III.3 Semester: **Autumn 1/ 1<sup>st</sup> semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **5**

III.6 The topic of the course

The discipline studies: Main groups of diseases benefiting from prophylactic programs through kinesiology: secondary and tertiary kinetoprophylaxis in locomotory diseases - chronic rheumatic diseases, posture and alignment disorders, congenital deficiencies, defined organic-functional sequel of the mio-arthokinetic apparatus. Another objective is the study of secondary and tertiary kinetoprophylaxis in respiratory diseases, cardiovascular diseases, functional diseases of the nervous system, nutrition and metabolism diseases (diabetes, obesity, proliferation of dyslipidemias in atherosclerosis). Very important is the chapter on child and pupil kinetoprophylaxis and kinetoprophylaxis at the age of puberty.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DC.01.06**

III.2 Course: **Medical informatics. Biostatistics**

III.3 Semester: **Autumn 1/ 1<sup>st</sup> semester**

III.4 Number of hours weekly: **2**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

Objectives of the discipline: Students acquire the notions of medical computer systems, databases and relational database management systems, as well as the acquisition of medical statistics and the application of acquired knowledge to solve concrete problems. Also, the discipline aims to familiarize with the most common computer medical applications and in particular to highlight their impact on medical services and medical research related to data management in medical records - medical, financial, medical, treatment sheets, electronic prescriptions, databases with medical information accessible to large medical communities - telemedicine, dictionaries, electrocardiogram, electroencephalogram, tomography, etc., monitoring, modeling - computerization, multimedia use for informational and educational purposes.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DC.01.07**

III.2 Course: **Behavioral sciences. Medical psychology. Medical Sociology**

III.3 Semester: **Autumn 1/ 1<sup>st</sup> semester**

III.4 Number of hours weekly: **2**

III.5 Number of credits ECTS: **2**

### III.6 The topic of the course

The objectives of the course are: to know the main aspects of human behavior and to acquire the theoretical and methodological elements applicable in balneo-physiotherapist-patient relationships, to develop the capacity of analysis and operation with concepts specific to behavioral sciences, to develop the abilities to find optimal solutions in the process of balneo-physiotherapist-patient, applying the communication strategies specific to a good relationship between the balneo-physiotherapist and the patient, acquiring the necessary abilities, awareness of the applicative elements of the behavioral sciences in the positive evolution of the balneo-physiotherapist-patient relationship.

#### I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

#### II. Undergraduate

#### III.1 Course code: **DC.01.08**

#### III.2 Course: **Physical education and sports**

#### III.3 Semester: **Autumn 1/ 1<sup>st</sup> semester**

#### III.4 Number of hours weekly: **1**

#### III.5 Number of credits ECTS: **1**

#### III.6 The topic of the course

The objectives of the discipline include the study of the notions regarding the role of physical education and sport in terms of: maintaining optimal health status, encouraging growth processes and harmonious physical development, developing basic and specific motor skills, ability to form habits to practice systematically and correct physical exercise, basic skills formation, development of qualities, moral and intellectual traits, knowledge and use of general physical exercises.

#### I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

#### II. Undergraduate

#### III.1 Course code: **DS.01.09**

#### III.2 Course: **Practical skills**

#### III.3 Semester: **Autumn 1/ 1<sup>st</sup> semester**

#### III.4 Number of hours/ semester: **56**

#### III.5 Number of credits ECTS: **2**

#### III.6 The topic of the course

This discipline studies: the technique and methodology of conducting an anamnesis, the acquisition of the knowledge necessary to perform a complete objective examination, the

general methodological principles in the practice of complementary investigations, the knowledge and the measurement of the motoric parameters that can be influenced in various pathological conditions, the acquisition of the medical ethics values and human ethical standards of patient care and methods of dealing with patients, their families or other people involved in their care, the development of team-building skills.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DF.02.10**

III.2 Course: **Anatomy II**

III.3 Semester: **Spring 1/ 2<sup>nd</sup> semester**

III.4 Number of hours weekly: **2**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

Objectives of the discipline: Knowledge of the human body structures, their organization in systems, the insight of the notions regarding the morphology and structure of the central and peripheral nervous system, the insight of the morphology and structure of the respiratory, cardiovascular, nervous, digestive, urogenital, endocrine system, the adaptation of the information provided to the students, as well as the correlation of the descriptive anatomy elements at the level of their respective structures, and applying the knowledge in the practice of kinetotherapy and medical rehabilitation.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DF.02.11**

III.2 Course: **Physiology**

III.3 Semester: **Spring 1/ 2<sup>nd</sup> semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **5**

III.6 The topic of the course

Objectives of the discipline: To know the vital functions and the mechanisms that ensure them, to correlate the notions of anatomy with the functions performed by the body system, to acknowledge the integrity of the human being, to know the neuro-endocrinological

metabolic possibilities' adaptation to the external environment, to the exogenous factors and to define the normal functions of the human organism's structures.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.02.12**

III.2 Course: **Health education and first aid**

III.3 Semester: **Spring 1/ 2<sup>nd</sup> semester**

III.4 Number of hours/ semester: **4**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

Objectives of the discipline: to know the main elements of health education, first aid methods, hygiene lifestyle information, recognition of major medical and surgical emergencies, knowledge of the emergency response algorithm. It is worth mentioning the knowledge of public health problems through the use of leaflets or scientific films of the main health education elements. It is important to develop the first aid techniques.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.02.13**

III.2 Course: **Motor and somato-functional measurement and evaluation. Osteoarticular and muscular evaluation**

III.3 Semester: **Spring 1/ 2<sup>nd</sup> semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **5**

III.6 The topic of the course

Objectives of the discipline: to know the basic notions, techniques and methods in the field of motor and somato-functional evaluation and measurement, to evaluate the rehabilitation of motor and sensory deficiencies caused by injuries, various components of the locomotor apparatus, identification, description and use of terms and concepts regarding motor measurement and evaluation and somato-functional, as well as its relationship with physical therapy and medical rehabilitation. Also identifying, describing and using the terms of kinantropometry and its relationship with physical and rehabilitation therapy, functional primary assessment (methods) and the use of specific medical rehabilitation techniques.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DD.02.14**

III.2 Course: **Hygiene**

III.3 Semester: **Spring 1/ 2<sup>nd</sup> semester**

III.4 Number of hours weekly: **2**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

Objectives of the discipline: to know the environmental risk factors, nutrition and infectious diseases that cause imbalances that induce the state of disease, to ensure sanogenic microclimate in living and working environment, hygiene of water, air, soil, radiation, residues, conducting a food survey in various diseases, the elaboration of the epidemiological investigation protocol in different situations.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.02.15**

III.2 Course: **Kynetotherapy**

III.3 Semester: **Spring 1/ 2<sup>nd</sup> semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **2**

III.6 The topic of the course

Objectives of the discipline: formation of the theoretical and practical knowledge and skills system, the knowledge of motricity, the knowledge and understanding of the concepts regarding the complex determination of motricity (the movement as process-product-instrument) and the research of its development, the underpinning of the principles underlying the motor education and movement control , the understanding of motricity as a form of inter-human communication.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DC.02.16**

III.2 Course: **English language**

III.3 Semester: **Spring 1/ 2<sup>nd</sup> semester**



III.4 Number of hours weekly: **2**

III.5 Number of credits ECTS: **2**

III.6 The topic of the course

The objectives of the discipline are: the use of English specific lexical-grammatical structures in the clear, concise and coherent communication of information to the interlocutors, the development of the ability to communicate orally and in writing with the patient and the doctor, the practice of language in the professional and semi-professional on topics specific to the field of human health.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DC.02.07**

III.2 Course: **Physical education and sports**

III.3 Semester: **Spring 1/ 2<sup>nd</sup> semester**

III.4 Number of hours weekly: **1**

III.5 Number of credits ECTS: **1**

III.6 The topic of the course

Objectives of the discipline include: Knowledge and deepening of the notions regarding the role of physical education and sport in terms of: maintaining an optimal state of health, fostering growth processes and harmonious physical development, developing basic and specific motor skills, training capacity and habits, the systematic and correct practice of physical exercises, the formation of basic skills and applicative utility and the development of moral-volitive and intellectual qualities and trait.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.02.18**

III.2 Course: **Practical skills**

III.3 Semester: **Spring 1/ 2<sup>nd</sup> semester**

III.4 Number of hours/ semester: **56**

III.5 Number of credits ECTS: **2**

III.6 The topic of the course

The objectives of this discipline are: the technique and methodology of conducting an anamnesis, the acquisition of the knowledge necessary to perform a complete objective

examination, the general methodological principles in the practice of complementary investigations, the knowledge and the measurement of the motoric parameters that can be influenced in various pathological conditions, the acquisition of the medical ethics values and human ethical standards of patient care and methods of dealing with patients, their families or other people involved in their care, the development of team-building skills.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.02.19**

III.2 Course: **Specialized medical practice**

III.3 Semester: **Spring 1/ 2<sup>nd</sup> semester**

III.4 Number of hours/ semester: **120**

III.5 Number of credits ECTS: **2**

III.6 The topic of the course

The specialized medical practice is based on the partnership between USV, “St. John” Suceava Hospital, Suceava Polyclinic and social centers. From a practical point of view, students should perform patient assessments and apply rehabilitation programs.

**YEAR II**

Course code	Course	Autumn semester / credits	Spring semester / credits
DF.03.01	Pathophysiology	3	
DD.03.02	Medical semiology and internal medicine	4	
DD.03.03	Pharmacology	3	
DS.03.04	Kinesiology	5	
DS.03.05	Massage and complementary techniques	4	
DS.03.06	Rehabilitation in orthopedics and traumatology	5	
DC.03.07	English language	2	
DC.03.08	Physical education and sports	1	
DS.03.09	Practical skills	2	

DS.04.10	Electrotherapy		4
DS.04.11	Balneo climatology and Hydrotherapy		4
DD.04.12	Medical deontology. Bioethics		3
DS.04.13	Neurology and neurorehabilitation. Physiokinetotherapy and rehabilitation in neurological diseases		4
DD.04.14	Surgical Semiology and Surgery		3
DR.04.15	Biomedical instruments for rehabilitation		2
DS.04.16	Geriatrics and rehabilitation of the elderly patient		4
DS.04.17	Specialized medical practice		2
DS.04.18	Practical skills		2
Total		<b>29</b>	<b>28</b>

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DF.03.01**

III.2 Course: **Pathophysiology**

III.3 Semester: **Autumn 2/ 3rd semester**

III.4 Number of hours weekly: **2**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

General physiological mechanisms, chemical composition of living matter, fundamental properties of living matter, cell pathophysiology, locomotor system (osteo-articular, muscles), nervous system, breathing, circulation, digestion, excretion, metabolism, functions of blood components (shaped elements and plasma, hemostasis, blood groups).

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DD.03.02**

III.2 Course: **Medical semiology**

III.3 Semester: **Autumn 2/ 3rd semester**

III.4 Number of hours weekly: **3**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

Objectives of the discipline: Correct acquisition of medical terminology, recognition of vital signs and symptoms and signs of disease, the failure of the technique and methodology of conducting an anamnesis (interview), acquiring knowledge to identify major syndromes in medical pathology, learning practical skills in conducting complementary explorations. It is important to analyze and corroborate clinical symptoms and signs with the results of complementary explorations.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DD.03.03**

III.2 Course: **Pharmacology**

III.3 Semester: **Autumn 2/ 3rd semester**

III.4 Number of hours weekly: **2**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

Objectives of the discipline: knowledge of the place and mechanisms of pharmacodynamic action (action on pharmacoreceptors, enzymes or mediators and cell messengers), factors influencing pharmacodynamic action; the inter- and intra-individual pharmacological variability, the understanding and knowledge of the action of drugs on the body as a whole, how they influence the functions of the human body and the application of this knowledge in the practice of nutritionists / physiotherapists. It is also necessary to know the mechanisms of action at the molecular and cellular level of the main groups of drugs, the basic notions regarding the pharmacokinetic parameters in different categories of patients in nutrition and kinetotherapy, as well as the pharmacodynamic and pharmacokinetic particularities of medicinal products in different categories of patients (elderly, pediatric, pregnant or nursing mothers, patients with renal or hepatic impairment).

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.03.04**

III.2 Course: **Kinesiology**

III.3 Semester: **Autumn 2/ 3rd semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **5**

III.6 The topic of the course

Objectives: knowledge and understanding of the concepts of motricity complex determination (movement as a process-product-instrument) and of its development research, learning of the principles underpinning motor education and movement control, understanding of motricity as a form of inter-human communication. There are studied fundamental means of kinetotherapy, therapeutic physical exercise, complex motor skills, means specific to kinetology associated with exercise: posture, massage, ergotherapy, non-specific means of kinesiology - natural physical agents, artificial physical agents, mobilization, diet, methods of postural reeducation in kinetotherapy and basic objectives in kinesiology.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.03.05**

III.2 Course: **Massage and complementary techniques**

III.3 Semester: **Autumn 2/ 3rd semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

Objectives of the discipline: acquiring the main massage techniques for different body regions with the indications and contraindications of the massage to ensure maximal efficiency and avoiding unwanted effects, knowing the involvement of the massage in the prevention of illnesses and recovering the state of health, making a complete massage session, methodical and systematic processing of each body region, depending on the anatomical and functional particularities, knowing the limits of the maintenance and therapeutical massage, depending on the pathology - indications and contraindications, accidents, prevention measures and compensating the unwanted effects.

The emphasis is on training, strengthening and refining the knowledge and skills to apply the techniques corresponding to the various massage procedures (main, secondary), depending on the various general, partial, segmental, local applications for prophylactic, hygienic, therapeutic and rehabilitation purposes.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.03.06**

III.2 Course: **Rehabilitation in orthopedics and traumatology**

III.3 Semester: **Autumn 2/ 3rd semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **5**

III.6 The topic of the course

Objectives of the discipline: the study of the traumatic osteo-articular process and of the physiological healing processes; functional assessment of trauma patients, introduction of specific post-traumatic osteo-articular rehabilitation protocols, definition of trauma in orthopedics and the healing process, clinical and paraclinical assessment of patients with orthopedic trauma, definition of post-traumatic rehabilitation protocols, dynamic monitoring of patients with orthopedic-traumatic diseases, the anatomical function of osteo-articular trauma, the regional evaluation of the trauma effects.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DC.03.07**

III.2 Course: **English language**

III.3 Semester: **Autumn 2/ 3rd semester**

III.4 Number of hours weekly: **2**

III.5 Number of credits ECTS: **2**

III.6 The topic of the course

The objectives of the discipline are: the use of English specific lexical-grammatical structures in the clear, concise and coherent communication of information to the interlocutors, the development of the ability to communicate orally and in writing with the patient and the doctor, the practice of language in the professional and semi-professional on topics specific to the field of human health.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DC.03.08**

III.2 Course: **Physical education and sports**

III.3 Semester: **Autumn 2/ 3rd semester**

III.4 Number of hours weekly: **1**

III.5 Number of credits ECTS: **1**

III.6 The topic of the course

Objectives of the discipline: optimization of the body's physical development, morphological and functional indexes and correct posture of the body, enrichment of the knowledge system, skills, motor skills, aptitude-specific and specific to some branches of sport, the development of motor rhythmic and the expressiveness of movements, the endowment of students with independent work techniques.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.03.09**

III.2 Course: **Practical skills**

III.3 Semester: **Autumn 2/ 3rd semester**

III.4 Number of hours/ semester: **56**

III.5 Number of credits ECTS: **2**

III.6 The topic of the course

The objectives of this discipline are: the technique and methodology of conducting an anamnesis, the acquisition of the knowledge necessary to perform a complete objective examination, the general methodological principles in the practice of complementary investigations, the knowledge and the measurement of the motoric parameters that can be influenced in various pathological conditions, the acquisition of the medical ethics values and human ethical standards of patient care and methods of dealing with patients, their families or other people involved in their care, the development of team-building skills.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.04.10**

III.2 Course: **Electrotherapy**

III.3 Semester: **Spring 2/ 4th semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

After promoting this course the students will be able: to recognize the terms and shape of currents used in electrotherapy, to know types of diseases and the pathology that benefits from the indications of applying electrotherapy and the methods of applying electrotherapy procedures and to know the temporary and permanent contraindications of applying electrotherapy currents.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DF.04.11**

III.2 Course: **Balneoclimatology and hydrotherapy**

III.3 Semester: **Spring 2/ 4th semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

Objectives of the discipline are: acknowledging the balneo-climatology and hydrotherapy's importance in physical-kinetic rehabilitation, its indications and contraindications and acquiring the main techniques for conducting hydrotherapy and balneoclimatology

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DD.04.12**

III.2 Course: **Medical deontology. Bioethics**

III.3 Semester: **Spring 2/ 4th semester**

III.4 Number of hours weekly: **2**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

The course aims to establish and deepen some basic concepts in the field of ethical theories and the principles of biomedical ethics, awareness of the need for continuous training, efficient use of resources and learning techniques for personal and professional development. At the end of the course the students will be able to: describe, explain and apply practically ethical theories and principles of biomedical ethics, identify the main values of the medical team - patient relationship and their impact on the therapeutic decision and the quality of the medical act, explain the concept of confidentiality and informed consent, describe the concept of vulnerable population and apply the concept in medical practice, explain the ethical issues related to research on human subjects.



I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.04.13**

III.2 Course: **Neurology and neurorehabilitation. Physiokinetotherapy and rehabilitation in neurological diseases**

III.3 Semester: **Spring 2/ 4th semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

The objectives of the discipline are: acquiring elements of medical pathology with applicability in the current professional practice, managing the patient with neurological diseases, evaluating and monitoring the patient with neurological diseases, establishing the objectives of the rehabilitation program on this type of diseases, the indications and contraindications of the therapeutic arsenal in the program of rehabilitation.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DD.04.10**

III.2 Course: **Surgical Semiology and Surgery**

III.3 Semester: **Spring 2/ 4th semester**

III.4 Number of hours weekly: **3**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

Objectives of the discipline: to establish and deepen some basic notions in the field of surgery, to train the students and to practice the various basic medical and surgical operations (injections, infusions, dressings, embossments, etc.) as well as some small surgical procedures with maximum emphasis on lifesaving and life support maneuvers (cardio-cerebro-respiratory resuscitation, tracheostomy, puncture, haemostasis, etc.), training of students on professional medical ethics, rules of doctor-patient relationship and team work.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DR.04.15**

III.2 Course: **Biomedical instruments for rehabilitation**

III.3 Semester: **Spring 2/ 4th semester**

III.4 Number of hours weekly: **2**

III.5 Number of credits ECTS: **2**

III.6 The topic of the course

Objectives of the discipline: Introducing students in the themes specific to biomedical instrumentation for rehabilitation and medical equipments by presenting basic concepts of medical electronics, constructive and functional principles of medical electrical equipments and means of automatic processing of data provided by these medical equipments, biomedical applications, especially in rehabilitation, the acquisition by the students of the fundamental notions specific to the biomedical instrumentation for rehabilitation necessary for the understanding of the future specialized disciplines, the acquisition of practical skills for measuring and verifying the bioelectric phenomena studied at the course.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.04.16**

III.2 Course: **Geriatrics and rehabilitation of the elderly patient**

III.3 Semester: **Spring 2/ 4th semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

The objectives of the course are: acquiring elements of medical pathology with applicability in current practice, geriatric patient management, evaluation and monitoring of the geriatric patient, establishing the objectives of the rehabilitation program specific to the population group, indications and contraindications of the therapeutic arsenal in the rehabilitation program.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.04.17**

III.2 Course: **Specialized medical practice**

III.3 Semester: **Spring 2/ 4th semester**

III.4 Number of hours semestrial: **120**

III.5 Number of credits ECTS: **2**

III.6 The topic of the course

The specialized medical practice is based on the partnership between USV, “St. John” Suceava Hospital, Suceava Polyclinic Suceava and social centers. From a practical point of view, students should perform patient assessments and apply rehabilitation programs.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.04.8**

III.2 Course: **Practical skills**

III.3 Semester: **Spring 2/ 4th semester**

III.4 Number of hours/ semester: **56**

III.5 Number of credits ECTS: **2**

III.6 The topic of the course

The objectives of this discipline are: the technique and methodology of conducting an anamnesis, the acquisition of the knowledge necessary to perform a complete objective examination, the general methodological principles in the practice of complementary investigations, the knowledge and the measurement of the motoric parameters that can be influenced in various pathological conditions, the acquisition of the medical ethics values and human ethical standards of patient care and methods of dealing with patients, their families or other people involved in their care, the development of team-building skills.

### YEAR III

Course code	Course	Autumn semester / credits	Spring semester / credits
DC.05.01	Methods of scientific research	3	
DS.05.02	Rheumatology and rehabilitation in	5	

	rheumatological diseases		
DS.05.03	Pediatrics and child rehabilitation	5	
DS.05.04	Rehabilitation in cardiovascular diseases	3	
DS.05.05	Epidemiology	4	
DS.05.06	Radiology and medical imaging	4	
DC.05.07	Dermatology	3	
DS.05.08	Practical skills	2	
DS.06.09	Balneoclimatology and hydrotherapy		4
DS.06.10	Rehabilitation in sports medicine		3
DS.06.11	Rehabilitation in respiratory diseases		3
DS.06.12	Physiotherapy in physical and sensorial deficiencies		4
DS.06.13	Occupational therapy		3
DS.06.14	Bioengineering of rehabilitation		3
DS.06.15	Nutrition and dietetics		4
DS.06.16	Practical skills		2
DS.06.17	Practical internship		2
DS.06.18	Internship for the elaboration of the license paper		2
	Total	<b>29</b>	<b>30</b>

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DC.05.01**

III.2 Course: **Methods of scientific research**

III.3 Semester: **Autumn 3/ 5th semester**

III.4 Number of hours weekly: **3**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

Objectives of the discipline: The student learns to summarize, carry out and present a scientific article of different types, to write a scientific paper, to document on a given theme, to identify the necessity of writing an article, to know how to present the results of certeries, types of scientific articles, to write an experiment or grant of different types and to present a scientific paper: oral, poster.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.05.02**

III.2 Course: **Rheumatology and rehabilitation in rheumatological diseases**

III.3 Semester: **Autumn 3/ 5th semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **5**

III.6 The topic of the course

Objectives: knowledge of the main rheumatic diseases encountered at the population, knowledge of the main methods of treatment of rheumatic diseases, explanation of the content of the discipline by using the existing materials in the kinetotherapy room, design and evaluation of practical activities specific to the discipline and learning techniques for the evaluation and treatment of rheumatic diseases.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.05.03**

III.2 Course: **Pediatrics and child rehabilitation**

III.3 Semester: **Autumn 3/ 5th semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **5**

III.6 The topic of the course

Objectives: knowledge of the child's main stages of development, explaining the content of the discipline by using the existing materials in the kinetotherapy room, design and evaluation of practical activities specific to the discipline, learning techniques for the assessment and treatment of pediatric-related disorders benefiting from kinetic treatment.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.05.04**

III.2 Course: **Rehabilitation in cardiovascular diseases**

III.3 Semester: **Autumn 3/ 5th semester**

III.4 Number of hours weekly: **2**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

Objectives of the discipline: adaptation of the rehabilitation program according to the patient's particularities, knowledge of the cardiovascular pathology that can benefit from medical rehabilitation, knowledge of the indications and contraindications of the means of rehabilitation applied in the cardiovascular pathology, evaluation and functional monitoring of the cardio patient -vecularly before, during and after the completion of the rehabilitation program, the compilation and application of a cardiovascular pathology-specific rehabilitation program, based on the patient's particularities and functional indexes.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.05.05**

III.2 Course: **Epidemiology**

III.3 Semester: **Autumn 3/ 5th semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

Objectives of the discipline: acquiring an elementary concept of epidemiology, applying the physical therapy programs correlated with the functional diagnosis and according to the doctor's instructions, also performing the secondary prophylaxis and developing a pathology-adapted kinetotherapy program, integrating appropriate kinetotherapy techniques and methods.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.05.06**

III.2 Course: **Radiology and medical imaging**

III.3 Semester: **Autumn 3/ 5th semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

Objectives of the discipline: Assimilation of radiology and medical imaging elements with applicability in the current practice, as well as specialists in balneophysiokinetotherapy

and rehabilitation; assimilation of specialized and differential diagnosis terms, important in the current practice and communication with specialists from other fields.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.05.07**

III.2 Course: **Dermatology**

III.3 Semester: **Autumn 3/ 5th semester**

III.4 Number of hours weekly: **2**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

Objectives of the discipline: acquiring an elementary notion of dermatological semiology, applying physiotherapy programs correlated with functional diagnosis and according to the doctor's instructions, also performing the secondary prophylaxis, achieving a pathology-adapted kinetotherapy program, integrating appropriate kinetotherapy techniques and methods.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.05.08**

III.2 Course: **Practical skills**

III.3 Semester: **Autumn 3/ 5th semester**

III.4 Number of hours / semester: **24**

III.5 Number of credits ECTS: **2**

III.6 The topic of the course

The objectives of this discipline are: the technique and methodology of conducting an anamnesis, the acquisition of the knowledge necessary to perform a complete objective examination, the general methodological principles in the practice of complementary investigations, the knowledge and the measurement of the motoric parameters that can be influenced in various pathological conditions, the acquisition of the medical ethics values and human ethical standards of patient care and methods of dealing with patients, their families or other people involved in their care, the development of team-building skills.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.06.09**

III.2 Course: **Balneoclimatology and hydrothermotherapy**

III.3 Semester: **Autumn 3/ 5th semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

The objectives of this discipline: determination of the biological bases of the natural curative factors, knowledge of physical therapy involvement in disease prevention and rehabilitation, knowing the types of mineral water, knowledge of physiological and therapeutic influences of mineral waters and natural factors in prophylaxis and rehabilitation treatments, Knowledge of immediate and late adaptations of somatic and vegetative functions to natural factors used in rehabilitation treatment.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.06.10**

III.2 Course: **Rehabilitation in sports medicine**

III.3 Semester: **Spring 3/ 6th semester**

III.4 Number of hours weekly: **3**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

Objectives of the discipline: knowing general notions about sports pathology, adapting the rehabilitation program depending on the stage of the disease and the functional capacity of the patient, identifying the objectives to be achieved, the available resources, the conditions for their completion, the working steps, the working times, the related implementation deadlines and the related risks, Identifying roles and responsibilities in a multidisciplinary team and applying effective relationship and work techniques within the team and in relation to the patient.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.06.11**

III.2 Course: **Rehabilitation in respiratory diseases**

III.3 Semester: **Spring 3/ 6th semester**



III.4 Number of hours weekly: **3**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

Objectives of the discipline: Students become familiar with the possibilities of clinical and paraclinical diagnosis of respiratory diseases, learn to recognize them and get general information about pathology, learn the principles and methods of BFKT and rehabilitation and include them in the program of rehabilitation of the patient with respiratory diseases, adequate conduct for patient re-education, elaborate a coherent program of rehabilitation of deficiencies caused by respiratory diseases, individual application of specific methods of BFKT and respiratory rehabilitation, dealing with the main balneophyto-kinetic and respiratory rehabilitation programs.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.06.12**

III.2 Course: **Physiotherapy in physical and sensorial deficiencies**

III.3 Semester: **Spring 3/ 6th semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

Objectives of the discipline: knowing the main types of disability, familiarizing with the methodology of examination, prophylaxis and treatment, knowing the kinetic intervention algorithm in physical deficiencies, knowing the main deficiencies encountered in the school age population, knowing the main methods of correcting physical deficiencies, explanation of the content of the discipline by using the existing materials in the kinetotherapy room, design and evaluation of practical activities specific to the discipline, learning techniques to evaluate and correct physical deficiencies.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.06.13**

III.2 Course: **Occupational therapy**

III.3 Semester: **Spring 3/ 6th semester**

III.4 Number of hours weekly: **3**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

The course has the following objectives: the acquisition of basic notions of pathology, with particularities on apparatus and systems, developing therapeutic plans, applying the acquired knowledge in different professional situations and involvement in practical work.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.06.14**

III.2 Course: **Bioengineering of rehabilitation**

III.3 Semester: **Spring 3/ 6th semester**

III.4 Number of hours weekly: **3**

III.5 Number of credits ECTS: **3**

III.6 The topic of the course

The main objective of the discipline is to acquire and substantiate the theoretical and practical knowledge specific to the specialization of BFKT.

Objectives: knowledge and understanding of fundamental engineering phenomena with applications in medicine, training and completing the training of students with a series of knowledge necessary to understand some specialized courses in the BFKT study program, training and completing student training with a set of knowledge required for the use of BFKT specific biomechanics.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.06.15**

III.2 Course: **Nutrition and dietetics**

III.3 Semester: **Spring 3/ 6th semester**

III.4 Number of hours weekly: **4**

III.5 Number of credits ECTS: **4**

III.6 The topic of the course

Objectives: understanding the basic notions of nutrition; knowledge of caloric requirements in different physiological and pathological states; knowledge, understanding of basic concepts, theories and basic methods of the field and the area of balneocentesis

physiotherapy, their appropriate use in professional communication; using basic knowledge to explain and interpret various types of concepts, situations, processes, projects, etc. associated with the field of balneophysiokinetotherapy.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.06.16**

III.2 Course: **Practical skills**

III.3 Semester: **Autumn 3/ 5th semester**

III.4 Number of hours / semester: **28**

III.5 Number of credits ECTS: **2**

III.6 The topic of the course

The objectives of this discipline are: the technique and methodology of conducting an anamnesis, the acquisition of the knowledge necessary to perform a complete objective examination, the general methodological principles in the practice of complementary investigations, the knowledge and the measurement of the motoric parameters that can be influenced in various pathological conditions, the acquisition of the medical ethics values and human ethical standards of patient care and methods of dealing with patients, their families or other people involved in their care, the development of team-building skills.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.06.17**

III.2 Course: **Practical internship**

III.3 Semester: **Autumn 3/ 5th semester**

III.4 Number of hours / semester: **120**

III.5 Number of credits ECTS: **2**

III.6 The topic of the course

Objectives: acquiring the technique and methodology of making an anamnesis; acquiring the knowledge required to complete a complete objective exam; acquisition of general methodological principles in the practice of complementary investigations; knowledge and measurement of motoricity parameters that can be influenced in various pathological conditions; the acquisition of human and ethical ethics, ethical standards of patient care and methods of dealing with patients, their families or other persons involved in their care, the development of teamwork skills.

I. Study program: **Balneophysiokinetotherapy and Rehabilitation**

II. Undergraduate

III.1 Course code: **DS.05.18**

III.2 Course: **Internship for the elaboration of the license paper**

III.3 Semester: **Autumn 3/ 5th semester**

III.4 Number of hours / semester: **56**

III.5 Number of credits ECTS: **2**

III.6 The topic of the course

Objectives: knowledge of the specific basic notions of scientific research; explaining and interpreting the main ideas, basic processes and the theoretical and practical contents of the discipline; the compilation of a scientific paper in the field and the elaboration of the bachelor's thesis.