

### ЮГОЗАПАДЕН ҰНИВЕРСИТЕТ •НЕОФИТ РИЛСКИ• БЛАГОЕВГРАД

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#### FACULTY OF PUBLIC HEALTH, HEALTHCARE AND SPORT

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#### SPECIALTY «KINESITHERAPY»

**DEGREE** 

«BACHELOR»

INFORMATION

**PACKAGE** 

2025 year



## SOUTH WEST UNIVERSITY "NEOFIT RILSKI" FACULTY "PUBLIC HEALTH, HEALTHCARE AND SPORT"

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# QUALIFICATION CHARACTERISTICS

AREA OF HIGHER EDUCATION: 7. HEALTH AND SPORT

PROFESSIONAL DIRECTION: 7.4. PUBLIC HEALTH

SPECIALTY: KINESITHERAPY

DEGREE: BACHELOR

LEVEL OF THE NATIONAL QUALIFICATION FRAME: LEVEL 6, SUBLEVEL 65

NUMBER OF CREDITS ECTS: 240

PROFESIONAL QUALIFICATION: KINESITHERAPY

PERIOD OF EDUCATION: 4/FOUR / YEARS

FORM OF EDUCATION: REGULAR

INTRODUCED FROM YEAR: 2025/2026

VALID UNTILL:

CODE: 09.09.7.10

## QUALIFICATION CHARACTERISTICS of the specialty "Kinesiherapy"

Educational-qualification degree – BACHELOR Professional Qualification – KINESITHERAPIST Term of study - 4 years (8 semesters) Required number of credits - 240 (ECTS)

#### Argumentation of the need of qualified Kinesitherapists with Bachelor's degree.

Qualified Kinesitherapists are required for kinesitherapeutic practice in the healthcare system, social homes for children with physical and mental disabilities, homes for mentally handicapped persons, homes for the elderly and sheltered housing for children and adults, in public and private sector, kinesitherapeutic and sports centers for performing functional diagnostic, prophylactic, curative and rehabilitation activities in all age and professional groups, incl. health promotion.

#### 1. The main purpose of the training

To obtain knowledge, skills and competences for recovery and for maintaining the health and functional status of individuals of all ages. The educational objective is consistent with the important social role of kinesitherapists. They work for recovery and to maintain the optimal function and quality of life of individuals in loss of movement and movement disorders.

- The training is aimed at acquiring fundamental and specialized knowledge and skills for: Acquiring knowledge and skills for:
  - Carrying out correct investigation, analysis and diagnosis of dysfunctions of musculoskeletal, nervous, cardio-respiratory and other organs and systems.
  - Overcoming motor deficiency after traumas and illness, congenital abnormalities and inactivity.
  - Prophylaxis of complications resulting from limited motor activity and the specificity of post-traumatic conditions and diseases.
  - Maintaining the optimal health status of people with particularities in the physiological state (children, elderly people, women during pregnancy, etc.)
  - Creation of compensatory motor habits in presence of permanent structural and functional changes of musculoskeletal and neuromuscular systems.
  - Prevention, prophylactic and overcoming of the motor deficit in sports trauma and microtraumatism.

#### 2. Requirements for the training of kinetics specialists:

Kinesitherapeutic practice requires skills, broad knowledge and the ability to combine therapeutic activities with the individual's needs for prevention and treatment. Physical methods and means are used to maintain and restore physical health, either alone or in combination with other healing methods.

In this respect the students of kinesitherapy assimilate:

- 1. Medical-biological knowledge enabling physiological, biochemical, biomechanical analysis of motor function in norm and pathology.
- 2. Knowledge of general and special methods for functional examination and analysis of motor deficiency in musculoskeletal, neuromuscular and cardio-respiratory dysfunctions.
- 3. Knowledge of characteristics, physiological mechanism of action and methods of application of physical exercises, manual therapy, natural and reformed physical factors of people with deviations in health and functional state.
- 4. Combining and applying physical factors in a common kinesitherapeutic program with prognosis, short-term and long-term therapeutic goals, and tracking outcomes in overcoming motor deficiency in different patient groups.
- 5. Acquiring basic knowledge of main medical disciplines in order to correct understanding of the clinical condition of patients, the resulting statements and contraindications for the application of physical methods and optimal collaboration with the medical specialists.
- 6. Undertaking common indications on health-related disciplines such as: physiotherapy, hygiene and ecology, social and health legislation, etc.

#### 3. Qualification standard

The training is consistent with the professional role and competence of the kinesitherapists (general academic and specific competencies). There are general and professional-specific skills.

- 1. **General skills** (generally applicable and disclosing opportunities for practice) communicative (linguistic preparation, computer skills), ability to effectively assess of the functional capacity based on clinical thinking, acquaintance with information technologies, assessment, healing planning, research, ability to work continuously improvement and teamwork.
- 2. **Professional-specific skills** performing functional tests of the musculoskeletal system and evaluation, development and implementation of kinesitherapeutic programs, taking into account the results, applying kinesitherapeutic methods in various diseases. The kinesitherapeutic program, prepared with the Physician and Rehabilitation Medicine Physician, includes:
  - isotonic, isometric, isokinetic physical exercise;
  - analytic, group, breathing, underwater healing gymnastics;
  - positional and field treatment;
  - puff, suspension therapy and mechanic-therapy;
  - game therapy;
  - manual mobilization techniques of peripheral joint
  - soft tissues, mobilizations and tractions;

- relaxing and facilitating techniques
- post-isometric relaxation of the peripheral joints and the provocation of neuromuscular facilitation (Kabat);
- classical massage;
- applying electrotherapy under medical supervision;
- kinesitherapists daily record the examinations and procedures.

#### **Acquired competencies are needed to:**

- performing health services (diagnostics, planning, kinesitherapeutic activities, preventive activities);
- organization (of own work and teamwork, optimization of the work process);
- performing observations (data collection, participation in research).
- 4. **Learning disciplines for obtaining** advanced and in-depth theoretical and factual knowledge in the field of kinesotherapy for acquiring the **necessary knowledge**, **skills** and **competencies**.

The scientific foundations of kinesitherapy are biological, physical, humanitarian and clinical sciences.

The training is based on obligatory, elective and facultative disciplines.

#### **Obligatory courses:**

- o Specialized disciplines (kinesitherapy in diseases of the main medical specialties);
- o *Medico-biological disciplines* (anatomy, biomechanics and biophysics, physiology, biochemistry, pathoanatomy, pathophysiology);
- o *Clinical disciplines* (orthopedics and traumatology with orthotics and prosthetics, internal diseases, nervous diseases, pediatrics);
- o *General educational disciplines* (humanitarian, physical education and sport, adapted physical activity)

Specialized disciplines - integrate knowledge about structural and functional disorders necessary for adequate and effective treatment with kinesitherapeutic means, application of kinesitherapeutic methods in various diseases (traumatic and orthopedic, internal diseases, of the nerve system, in surgery) as well as specialized means (massage, manual mobilization techniques of peripheral joint, muscle techniques and peripheral nerves mobilizations), knowledge of general methods of functional and kinesitherapy assessment, pathogenesis o research and analysis, as well as knowledge on the impact of physical factors and balneology on different nosology.

*Medico-biological disciplines* - providing theoretical basis for specialized training, concepts and principles. They provide the base for understanding the body structure and functions, including those related to movements and physical exercise.

*Clinical disciplines* - acquiring knowledge about major pathological processes, etiology, pathogenesis, clinical picture of diseases, therapy for the use of kinesitherapy in complex treatment. They provide a certain amount of medical knowledge necessary for specialized training.

General educational subjects - acquiring knowledge and skills for interaction of the objects of kinesitherapeutic services, information support, psychomotor impact, pedagogical means,

theory and methodology of physical education, informatics, analysis and modeling of movements, basics of research with medical statistics, physical activity and sport with a health focus, adapted physical activity for people with disabilities. Concepts and principles of personality aspects, psychosocial and cognitive factors influencing behavior and disease. They provide a basis for understanding human behavior in health and illness, physical education and sporting activities such as psychomotor and psychosocial behavior in healthy patients and people with disabilities.

**Elective disciplines** allow for more knowledge related to the special subjects studied.

**Facultative disciplines** provide the opportunity to acquire specific knowledge and skills, depending on the interests of the students. Each student may optionally study any subject taught at the university, regardless of the faculty in which he / she is studying. Facultative disciplines: - Psychology of development in children and adolescence; - Sports Dances; - Classic dances; - Calanetics; - Aerobics; - Stretching; - Fitness; - Psychotherapy; Protection against disasters and accidents. The total hour number of facultative disciplines is up to 90 hours. The facultative disciplines are reflected in the student's diploma.

#### **Practical training includes:**

- 1. Clinical practice 960 astronomical hours, 43 credits (II VII semester).
- 2. Summer clinical practice 360 astronomical hours, 12 credits (II, IV, II semester).
- 3. Pre-graduate clinical practice 600 astronomical hours, 20 credits (VIII semester).

#### **Graduation:**

A State examination on the basics and means of kinesitherapy and its application to various diseases and disabilities - theory and practice.

The curriculum has been developed in accordance with: Uniform state requirements for the specialty "Kinesitherapy" (2014); Ordinance on accumulation and transfer of credits at Universities (2004); Higher Educational Act (HEA)Art.42 for the number of Bachelor's degree credits (not less than 240); Ordinance No. 4 of 6 of April 2006 on the competencies of kinesitherapists (2006) issued by the Ministry of Health; The European Physiotherapeutic Benchmark Bulletin (2003) and the National Qualifications Framework.

#### 5. Professional Conversion

Providing prophylactic, therapeutic and rehabilitation activities in the health care system, social homes for children with physical and mental disabilities, homes for the mentally handicapped, homes for the elderly and sheltered homes for children and adults, in the public and private sectors, kinesitherapeutic and sports centers for performing functional diagnostic, prophylactic, curative and rehabilitation activities in all age and professional groups, incl. health promotion.

The Qualification Characteristics was adopted at the Departmental Council of the Department of Kinesitherapy on June 17, 2016, Protocol No. 14, and the Faculty of Public Health, Health Care and Sports, 28 June 2016, Protocol No. 31 and endorsed by the Academic Concil of the South-West University "Neofit Rilski" on 29.06.2016 Protocol № 8 of 28.06.2016.

The qualification characteristics were supplemented, amended and approved at a meeting of the Department Council of the Department of Kinesitherapy held on 07.04.2025, Protocol No. 17, updated and adopted at a meeting of the Faculty Council of the Faculty of Public Health, Healthcare and Sports held on 07.05.2025, Protocol No. 38. The updated qualification characteristics were approved at a meeting of the Academic Council of the South-West University "Neofit Rilski" held on 11.06.2025, Protocol No. 21.

#### 2. CURRICULUM

**Specialty: Kinesitherapy** 

First year			
First semester	ECTS	Second semester	ECTS
	credits		credits
Anatomy part I	7,0	Anatomy part II	3,0
Basic Kinesitherapy Means and Methods Part I	4,0	Terapeutic Bases and Means of	4,0
Biomechanics and Biophysics	4,0	Kinesitherapy part II	
Hygiene and Ecology	1,0	Kinesiological Fundation of Kinesitherapy	2,0
Latin with Medical Terminology	2,0	Physiology	4,0
Medical Psychology	2,0	General Methods for Functional Studies and Assessment in Kinesitherapy	6,0
Medical Ethics and Deontology	2,0	Sport – Basic Gymnastics	0,0
Nursing Aid	1,0	Clinical Practice part I	7,0
Sport for all  Kinesitherapy in sport practice	2,0	Summer Clinical Practice part I	4,0
	Total: 30		Total: 30
Second year			
First semester	ECTS	Second semester	ECTS

	credits		credits
Biochemistry	2,0	Kinesitherapy in Orthopedics and Traumatology part II	4,0
Pathoanatomy	2,0	Soacial Medicine, Social Rehabilitation and Health	2,0
Pathophysiology	2,0	Promotion	
Orthopedics and Traumatology with Orthotics and Prosthetics	6,0	Pathokinesiology - Functional Analysis and Evaluation	4,0
Massage part I	6,0	Internal Deseases	5,0
		Massage part II	3,0
Kinesitherapy in Orthopedics and Traumatology part I	4,0	Elective discipline – Group I	1,0
Clinical Practice part II	8,0	Clinical Practice part III	7,0
		Summer Clinical Practice	4,0
		Elective disciplines – Group I	
		SPA therapy	1,0
		Aromatherapy	1,0
		Reflexology Informatics	1,0
			1,0
	Total: 30		Total: 30

Third year			
First semester	ECTS	Second semester	ECTS
	credits		credits
Natural, Transformed Physical Factors and Balneology part I	3,0	Kinesitherapy in Nervous and Mental Diseases part I	4,0
Kinesitherapy in Internal Disease	6,0	Natural, Transformed Physical Factors and Balneology part II	3,0
Neurological Diseases	6,0		
Manual Mobilization of Peripheral Joints	3,0	Kinesitherapy in Obstetrics and Ginecology	2,0
Pediatrics	2,0	Fundament of Scientific Research	2,0
Massage part III	2,0	Kinesitherapy in Child Diseases	3,0
Elective sport (Elective discipline – Group II)	0,0	Kinesitherapy in Geriatrics	1,0
Clinical Practice part IV	8,0	Ergotherapy	2,0
		Adapted Physical Activity	2,0
		Elective discipline – Group III	1,0
		Clinical Practice part V	6,0
		Summer Clinical Practice part III	4,0

Elective sport (Elective discipline – Group II)		Elective discipline – Group III	
Sport – Healing Swimming	0,0	Motion Rhythm and Dance	1,0
Sport - Basketball	0,0	Balneological Tourism	1,0
Sport – Tennis	0,0	Fitball	1,0
Sport – Athletics	0,0	Manual Therapy	1,0
		Basic Testing Tools in Neurology and Neurosurgery	1,0
	Total: 30		Total: 30
Fourth year			
First semester	ECTS credits	Second semester	ECTS credits

Kinesitherapy in Nervous and Mental Diseases part II	4,0	Pre-graduate Clinical Practice	20,0
Kinesitherapy in Surgery	5,0	Graduation  A State examination on the basics	10,0
Therory and Methodology of Physical Education and Sport Training	1,0	and means of kinesitherapy and its application to various diseases and disabilities - theory and practice.	
Muscle Techniques and Mobilization of Peripheral Nerves	2,0		
Social and Health Legislation	1,0		
Natural, Transformed Physical Factors and Balneology part III	6,0		
Elective discipline – Group IV	2,0		
Elective discipline – Group V	2,0		
Clinical Practice part VI	7,0		

Elective discipline – Group IV		
Mobilization Stretching	2,0	
Spelling and Pronunciation	2,0	
Kinesitherapy in Sport Practice	2,0	
Orthopedic Diagnosis	2,0	
Kinesiotaping	2,0	
Elective discipline – Group V		
Yoga and Pilates	2,0	
Progressive Proprioceptive Training	2,0	
Technology Innovations Used in Kinesitherapy	2,0	
Isokinetic Dynamometry	2,0	
Corrective Gymnastics	2,0	

FACULTATIVE DISCIPLINES

According to the internal university regulations, each student may optionally study any discipline taught at the university regardless of the faculty in which it is taught. The total lesson of the facultative disciplines is up to 90 hours. The facultative disciplines are reflected in the student's diploma.

#### **ANATOMY PART I**

ECTS credits: 7.0 Hours per week: 31+0se+0le+2pe

Evaluation: current control Kind of Discipline: Obligatory

Semester: I Exam: written

**Supervision:** 

**Department** Healthcare

**Lecturers:** 

Assos. prof. Manol Kalaniev, PhD

#### **Annotation:**

The discipline aims to provide fundamental preparation in one of the basic directions – study of the structure of human body and its normal development. The program provides an introduction to the arrangement and the basic functions of the human organism.

#### BASIC KINESITHERAPY MEANS AND METHODS PART I

**ECTS credits:** 4.0 **Hours per week:** 21+0se+0le+2pe

**Evaluation:** current control **Kind of discipline:** Obligatory

Semester: I Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

**Lecturers:** Assos. prof. Mariela Filipova, PhD

As. Nasko Nikolaev, PhD

#### **Annotations:**

In the training course, the students acquire the techniques and also their application and the justification of their healing effect.

The aim of the discipline is to make students know the essence of kinesitherapy, its history and professional characteristics, as well as its complete structure as a scientific and practical specialty.

#### **BIOMECHANICS AND BIOFISICS**

**ECTS credits:** 4.0 **Hours per week:** 21+0se+0le+2pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: I Exam: written

**Supervision:** 

**Department:** Healthcare, Comunication and computer techniques and technologies;

Kinesitherapy

Faculty of Public Health, Healthcare and Sport / Techniques Faculty

Lecturers: prof. Reni Kalfin, PhD

Assos. Prof. Dimitrina Kerina, PhD

As. Miglena Tsvetkova-Gaberska, PhD

Annotations: The obligatory discipline of "Biomechanics and Biophysics" has an interdisciplinary character and is built up of two relatively independent modules. It aims make students learn some fundamental knowledge in the field of different physical disciplines (mechanics, dynamics, statics, solid state physics), biology, physics, electrophysiology, biochemistry etc. and it serve as a basis for the special disciplines they study later.

Biomechanics consider the application of the basic principles of mechanics (kinematics, dynamics and statics) attached to the specifics of the human body and its movements and characteristic postures. The application of the knowledge, gained in this study, is very important in rehabilitation practice.

This knowledge of biomechanics is developed in the fields of - general biomechanics and biomechanics of the locomotors system. The study of the movements and postures of the body requires specific methods of research.

Biophysics knowledge is the basis of disciplines as: physiology, biochemistry, biomechanics, ect. Its structured in the following modules: biotermodynamics, biological membranes, peroxide oxidation, membrane transport via membranes, bioelectric potentials, passive electrical properties of cells and biological tissues. Biophysics is a new area for kinesitherapy specialists and it is for the first time present in their curriculum.

The exercise part of these two disciplines gives the students the opportunity to take practical and laboratory classes. The exercise of biomechanics includes solving computational and graphic tasks in coordinate systems, determination of kinematic and kinetic characteristics, mastery of terminology on kinematics and kinetics of human movements, practical exercises on isometric isokinetic and isokinetic isometric dynamometer measurements, analysis of postural fluctuations in different postures and participation of sensory systems, introduction to SFTR and others.

In the biophysics module, the exercise includes: energy consumption and energy exchange in people with indirect calorimetry, bioelectric impedance and determination of anthropometric parameters with body mass analyzer, bio-potential registration, spectrophotometric measurement of concentration of substances in biological fluids, etc.

#### HYGIENE AND ECOLOGY

**ECTS credits:** 1.0 **Hours per week:** 11+0se+0le+0pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: I Exam: written

**Supervision:** 

**Department** Medical Social Sciences

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Vaska Stancheva – Popkostadinova, PhD

#### **Annotations:**

The lecture course presents the most important health consequences of air, water and soil pollution. It presents the basic principles of healthy nutrition as well as hygienic aspects of the work process. The topics are under consideration of relevant national and international legislation.

#### LATIN WITH MEDICAL TERMINOLOGY

**ECTS credits:** 2.0 **Hours per week:** 0l+0se+0le+1pe

**Evaluation: exam** Kind of discipline: Obligatory

Semester: I Exam: written

**Supervision:** 

**Department:** Ethnology and Balkan Studies

**Faculty:** Faculty of Philology

Lecturers: assos.prof. Silvia Georgieva, PhD

**Annotations:** 

Kinesitherapy uses medical terminology in its basics clinical disciplines, so learning Latin is fundamental for in optimal professional preparation. Students are introduced to the specific features and opportunities of modern medical terminology.

In teaching project is based on the classical principle of science, synthesized in the trinity: ignorance – creative discovery – learning. The course offers an equal start and begins with the introduction of the Latin alphabet and the peculiarities of pronunciation in Latin Language. The teaching material is divided into two parts - grammar and word formation.

The first part considers the Greek and Latin word-forming elements. The medical vocabulary is presented on topics. Outlined basic points of Latin grammar needed to master medical terminology. Emphasis is placed on nouns and adjectives as main structural units in terminology.

#### MEDICAL PSYCHOLOGY

**ECTS credits:** 2.0 **Hours per week:** 21+0se+0le+0pe

**Evaluation:** exam **Kind of discipline:** Obligatory

**Supervision:** Exam: written

**Department** Psychology

Faculty Faculty of Philosophy

Lecturers: assos. prof. Natasha Angelova, PhD

#### **Annotations:**

The course of "Medical Psychology" includes the following modules: 1) psycho-diagnostics methodology; 2) disturbances in mental development, personality disorders, mental illness; 3) psychotherapeutic techniques, counseling, psycho-regulation.

The aim and the tasks are:

- to clarify basic concepts ant theories of medical psychology
- to achieve a clear understanding of the nature and peculiarities of research methods in medical psychology, and the need to comply with ethical requirements in psychological research;
- to clarify factors contributing to the mental illness;
- to clarify the peculiarities of the course of various mental illnesses and possible disturbances of mental development;
- to improve skills for psychological help and counseling.

#### MEDICAL ETHICS AND DEONTOLOGY

**ECTS credits:** 2.0 **Hours per week:** 21+0se+0le+0pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: I Exam: written

**Supervision:** 

**Department of Medical Social Sciences** 

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Rosen Kalpachki, PhD

#### **Annotations:**

The lecture course examines basic aspects of ethics, medical moral and medical deontology. It is expected that training will create opportunities for assessment and self-assessment, models of relationships, understanding of patient rights, and the need for confidentiality in the professional activity; Also to acquire knowledge about the medical-deontological problems in modern medical practice, legal and moral rules, debt and responsibility in professional offenses, ethic-deontological problems at the beginning and the end of life.

#### **NURSING AID**

**ECTS credits:** 1.0 **Hours per week:** 0l+0se+0le+1pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: I Exam: written

**Supervision:** 

**Department** Kinesitherapy

**Faculty** of Public Health, Healthcare and Sport

Lecturers: ass. Miglena Tsvetkova-Gaberska, PhD

#### **Annotations:**

The nursing aid curriculum for kinesitherapists is complaint with the specifics of their activity and educational attainment. It includes issues concerning regulatory requirements and regulations concerning the right to education and first aid. The discipline gives knowledge

and builds skills for first aid in injuries, breaks, bleeding, burns by various agents (thermal, chemical), electric shock, insect bites, life-threatening breathing and circulatory disorders, etc. It teaches students of the rules of desert and the ways of sorting the injured. It acquainted them with the inventory of the first-aid kits or pharmacies. It teaches them safe behavior in helping the victims and themselves. He acquainted them with triage victim sorting systems.

#### SPORT FOR ALL

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+0pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: I Exam: written

**Supervision:** 

**Department** of Sport

Faculty Public Health, Healthcare and Sport

Lecturers: assos. prof. Daniela Lekina, PhD

#### **Annotationns:**

The discipline "Sport for All" provides the necessary knowledge of the essence of this sporting movement on a global and national level by chronologically following the creation of its international and national structures. It clarifies the social, legal and organizational-methodical opportunities for everybody's sport. The sport favors free communication and promotes the social integration of people of different ages, learn status, work place or field of business.

The discipline is part of the curriculum of Kinesitherapy grade, such as obligatory discipline in first grade, first semester.

The main objective of the course is to form knowledge and create interest in students to the famous movement "Sport for All" in the world and in our country, promoting the healthy lifestyle doing systemic exercises and sports.

The tasks are related to the acquisition of the necessary knowledge by the students about the methodology of organization of sports activities with different age groups and their realization.

#### KINESITHERAPY IN SPORTS PRACTICE

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+0pe

**Evaluation:** exam Kind of discipline: Obligatory

Semester: I Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty Public Health, Healthcare and Sport

Lecturers: assos. prof. Maria Gramatikova, PhD

#### **Annotationns:**

The discipline "Kinesitherapy in Sports Practice" introduces students to the periods of sports training, their essence and peculiarities. Students acquire knowledge and skills for the application of specialized methods and means of kinesitherapy, for the rehabilitation of athletes with common sports injuries. They become familiar with the specifics of traumatism in football players, skiers, martial artists, athletes, etc. with the aim of preventing injuries in the given sport.

#### ANATOMY PART II

ECTS credits: 3.0 Hours per week: 21+0se+0le+1pe

**Evaluation:** exam Kind of discipline: Obligatory

Semester: II Exam: written

**Supervision:** 

**Department** of Healthcare

**Faculty** of Public Health Healthcare and Sports

Lecturers: assos. prof. Manol Kalaniev, PhD

#### **Annotations:**

Systematic anatomy studies the morphology of organs and systems, their unity and development of the human body. Anatomy of the human body is a basic discipline that enables the kinesitherapy student to prepare for his future prophylactic and healing activities.

#### TERAPEUTIC BASES AND MEANS OF KINESITHERAPY PART I

**ECTS credits:** 4.0 **Hours per week:** 21+0se+0le+2pe

**Evalutaion:** exam **Kind of discipline:** Obligatory

Semester: II Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Maria Gramatikova, PhD

Ass. Nasko Nikolaev

#### **Annotations:**

In the course the students acquire the techniques of application and the justification of the healing effect of the applied means.

The aim of the training on therapeutic bases and means of kinesitherapy is to make students know the essence of kinesitherapy, its history and professional characteristics, as well as its overall structure as a scientific and practical specialty.

#### KINESIOLOGY BASES AND MEANS OF KINESITHERAPY

**ECTS credits:** 2.0 **Hours per week:** 21+0se+0le+0pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: II Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty Public Health, Healthcare and Sport

Lecturers: assos. prof. Yulian Zlatkov, PhD

#### **Annotations:**

The Kinesiological foundation of kinesitherapy is a basic discipline for the preparation of the kinesitherapist. It studies the mechanism of the movements of the human body, and explain the peculiarities of the structures and the physiology of locomotors and nervous systems.

The aim of the course is to make students know the basic principles, laws and concepts of mechanics, as well as the anatomical and physiological foundations of the locomotors system;

the peculiarities in kinetics and kinematics of basic human movements; to measure and point the range of the joints.

The discipline uses and applies the knowledge of Anatomy Part I, biomechanics and biophysics.

Acquired knowledge and skills in Kinesiological foundation of kinesitherapy are the basis that students build upon in special disciplines like Pathobiomechanics and pathology and also Functional Diagnostics of locomotors system.

#### **PHYSIOLOGY**

**ECTS credits:** 5.0 **Hours per week:** 31+0se+0le+2pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: II Exam: written

**Supervision:** 

**Department** Healthcare

Faculty Public Health, Healthcare and Sport

Lecturers: prof. Reni Kalfin, PhD

Assistant Maria Ganeva

#### **Annotations:**

The discipline offers basic knowledge of the students in functions of all physiological systems in the human organism, in state of rest or doing physical exercise. The lecture course is divided in following three modules: (1) Nervous system, skeletal muscles, senses; (2) Physiological systems: endocrine, cardiovascular, respiratory, digestive, excretory, metabolism, thermoregulation; and (3) physiology of physical exercise. The highlights in the different modules are related to the specialty and refer to: contemporary ideas of organization and function of neuro-muscular system, muscle contraction, the types of muscle contractions, motor control, etc., as well as the specifics of adaptation in physiological functions doing physical exercise; the knowledge of pro - receptors for motor control as an aspect of modern kinesiotherapy techniques.

Practical training refers to methodology and methods of functional research such as: dynamometry and isokinetic dynamometry, kinesiological EMG, spiroergometry and others. Special attention is given to the physical exercise as a complex of stress-induced reactions as a result of general adaptation syndrome of the body and the physiological characteristics of fatigue in different conditions and exercise types.

The discipline is the key to learn more in later stage. Training on the proposed program requires knowledge of anatomy, biophysics, general biomechanics, as well as good

knowledge of high school material course in Chemistry, Biology, Physics and Mathematics. Computer skills and English language are really important.

### GENERAL METHODS FOR FUNCTIONAL STUDIES AND ASSESSMENT IN KINESITHERAPY

**ECTS credits:** 6.0 **Hours per week:** 31+0se+0le+3pe

**Evaluation:** exam **Kind of discipline:** obligatory

Semester: II Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos.prof. Stamenka Mitova, PhD

assistant Margarita Avramova, PhD

#### **Annotations:**

During the course the students acquire the basic methods for functional diagnostics of the locomotor system, the methods of assessment and research in kinesitherapy and the ways of their application.

The hall course develops the knowledge and skills of students about the nature, the possibilities and the main methodological rules for the application of methods, assessments and functional studies.

The aim of the training is to create skills and habits for students to perform functional diagnostics and its application in practice.

Learning tasks are related to the acquisition of skills and habits for the detection and measurement of functional deficits, presence of muscle disbalance (strength and weakness), disorders of the locomotors system and ways of finding them.

#### **SPORT - BASIC GYMNASTICS**

**ECTS credits:** 0.0 **Hours per week:** 01+0se+01e+2pe

**Evaluation:** current control **Kind of discipline:** Obligatory

Semester: II Exam: written

**Supervision:** 

**Department** of Sport

Faculty of Public Health, Healthcare and Sport

Lecturers: ass. Aleksandar Markov, PhD

#### **Annotations:**

The course of "Basic gymnastics" is really important for the professional qualification of the future kinesitherapists. It clarifies the applicability of gymnastics, its capabilities and priorities, according to the specifics and requirements of kinesitherapy. Students acquire knowledge both in terminology and in terms of individual tools and their applicability according to the organism capabilities and age. The practical application of the principles and methods of training, the selection of resources, and their dosing and psychological impact further enrich their theoretical and practical training.

#### CLINICAL PRACTICE PART I

**ECTS credits:** 7.0 **Hours per week:** 01+0se+0le+155astr. h pe

**Evaluation:** current control **Kind of discipline:** Obligatory

Semester: II Exam: written

**Supervision:** 

Department of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

#### **Annotations:**

The purpose of the practice exercise is to create skills and habits for students to make functional diagnosis and apply kinesitherapy to patients. In clinics students can apply the knowledge gained during the lectures and exercises on:

Therapeutic bases and means of kinesitherapy;

General methods for functional studies and assessment in kinesitherapy kinesitherapy;

- -Kinesiological basics of kinesitherapy;-
- -General care for the patient;

#### -Medical psychology

The tasks of the practices are related to the acquisition of skills and habits for the realization of a history, examination, diagnosis and measurement and research. Based on the knowledge gained in the kinesitherapy training, students conduct healing procedures under the guidance of a basic kinesitherapist and a lecturer.

In the course the students acquire skills and habits for working in a clinical atmosphere in a team of doctors, nurses and rehabilitators.

Practical training takes place in outpatient and hospital medical institutions (social homes for children with physical and mental disabilities, homes for the mentally handicapped, homes for the elderly and shelters for children and adults, in the public and private sectors, kinesitherapeutic and sports centers for performing functional diagnostic, prophylactic, curative and rehabilitation activities in all age and professional groups, including health promotion).

#### SUMMER CLINICAL PRACTICE PART I

**ECTS credits:** 4.0 **Hours per week:** 01+0se+0le+120 astr. h pe

**Evaluation:** current control **Kind of discipline:** Obligatory

Semester: II Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

#### **Annotations:**

The summer clinical practice aims to enable students under the guidance of the tutor to apply the methods for functional assessment of the locomotor system and to determine the rehabilitation potential of the patients. Students take a history of examination, palpation, goniometry, centimetry, MMT, and also they measure pulse rate, reflecting the results in their internship booklet, certificated in the study department. Under the guidance of the base kinesitherapist, the students prepare their kinesitherapeutic programs detailing the objectives, tasks and means of kinesitherapy. It also reflects the indications and contraindications of the particular patient.

#### **BIOCHEMISTRY**

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation:** exam Kind of discipline: Obligatory

Semester: III Exam: written

**Supervision:** 

**Department** of Chemistry

**Faculty** of Nature Mathematics

Lecturers: prof. Ivanka Stankova, PhD

#### **Annotations:**

The complex multimolecular organization of living matter, the chemical processes and the main metabolic chains that flow into living organisms, the enzymes, their chemical nature, their mechanism of action, the basics of biological oxidation, the supply and transformation of energy in the cell, the role of vitamins and hormones in metabolism, and others.

#### **PATHOANATOMY**

**ECTS credits:** 2.0 **Hours per week:** 21+0se+0le+0pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: III Exam: written

**Supervision:** 

Department of Pathophysiology

Faculty of Medicine, Medicine University

Lecturers: assos. prof. Radka Tafradjiiska Hadziolova, PhD

#### **Annotations:**

During their studies the students receive basic theoretical knowledge for the pathomorphology of certain socially significant diseases. Purpose and tasks: Students will acquire theoretically the material from the lecture course; acquire knowledge about the nature of the pathological processes, changes in the structures on the organ and organism level in conditions of disease.

#### **PATHOPHYSIOLOGY**

**ECTS credits:** 2.0 **Hours per week:** 21+0se+0le+0pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: III Exam: written

**Supervision:** 

**Department** of Pathophysiology

**Faculty** of Medicine, University of Medicine

Lecturers: assos. prof. Radka Tafradziiska Hadziolova, PhD

#### **Annotations:**

During their studies the students receive basic theoretical knowledge about the pathophysiology of some socially significant diseases. Purpose and tasks: Students will theoretically acquire the lecture course material and understand the essence of the pathological processes, study the changes in cellular, organ and organ function at the occurrence of a disease.

## ORTHOPEDICS AND TRAUMATOLOGY WITH ORTHOTICS AND PROSTHETICS

**ECTS credits:** 6.0 **Hours per week:** 31+0se+0le+3pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: III Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assistant. Atanas Andreev, PhD

#### **Annotations:**

The aim of the Orthopedics and Traumatology course is to give students fundamental knowledge in the field of pathology of the locomotor system. The lecture course introduces

the diseases of the musculoskeletal system related to genetic anomalies, congenital and acquired bone and soft tissue deformities. Changes in the skeleton and muscles as a result of metabolic, endocrine, neurological, oncological disorders. The main methods of diagnosis and treatment and the outcome of the disease. It presents the biochemical and physiological mechanisms of bone adhesion as well as its pathology.

Different types of injuries of the locomotor system such as sprain, sprain and bone fracture are considered. Fractures of skeletal bones are examined, drawing attention to the diagnosis, clinical picture of non-surgical and surgical treatment. Post-operative behavior, complications of treatment and rehabilitation.

#### **MASSAGE PART I**

**ECTS credits:** 6.0 **Hours per week:** 31+0se+0le+3pe

**Evaluation:** current control **Kind of discipline:** Oblligatory

Semester: III Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Stamenka Mitova, PhD

Assistant Margarita Avramova, PhD

#### **Annotations:**

The curriculum is devoted to the history of massage, anatomic and physiologic data for individual organs and systems and the impact of massage on it- skin, muscles, joints, blood, lymph and nervous systems, classification of the massage, ways and methods of curative massage. The kinesitherapy training program includes learning and conducting massage (classic and reflective) for individual types of illness. In the various nosologic units the massage technique is different. Massage must be adapted to the specific pathological finding, and it is established by appropriate kinesiological analysis. It deals with massage in traumatic and surgical diseases, diseases of the nervous system, various internal and joint diseases and other diseases. After a brief clinical characterization of the disease and the discovery of the pathological finding, the aims and tasks of the massage are set, the technique is described mainly for the classical and also some of the reflexive massages used in a certain nosology.

#### KINESITHERAPY IN ORTHOPEDICS AND TRAUMATOLOGY PART I

**ECTS credits:** 3.0 **Hours per week:** 11+0se+0le+2pe

**Evaluation:** current control **Kind of discipline:** Obligatory

Semester: III Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Stamenka Mitova, PhD

#### **Annotations:**

In the course the students acquire skills for application of the basic kinesitherapeutic devices for treatment of musculoskeletal system, as well as develop knowledge about the physiological mechanism of their impact. The main methodical rules and strategies for conducting kinesitherapy in postural disturbances, spinal distortions and flatness are studied.

The whole course develops the knowledge and skills of students about the nature, the possibilities and the basic methodological rules for the use of kinesitherapy in postural disturbances, vertebral distortions and flatness. The main methodical rules and strategies of kinesitherapy in orthopedic and traumatology diseases are studied.

The complete course develops the knowledge and skills of students about the nature, the capabilities and the basic methodological rules of kinesitherapy in orthopedic and traumatological diseases. In the end of this course students must be able to:

- -Identify and analyze the functional deficiency developed by patients in the course of the disease and the recovery process;
- To know the characteristics of the functional deficiency developed in various diseases of the musculoskeletal system;
- To create a kinesitherapeutic program that is tailored to the particular nosology and individual characteristics of each individual patient;
- To plan the strategy of kinesitherapy during the whole functional-rehabilitation process;
- To select the most effective means of kinesitherapy and to apply an adequate dosage in the course of the daily changing patient functional status.

In practice, they undergo subjective research, objective research, evaluation and planning of kinesiotherapy, in case of impaired function of the locomotory system.

#### CLINICAL PRACTICE PART II

**ECTS credits:** 8.0 **Hours per week:** 01+0se+01e+180h pe

**Evaluation:** current control **Kind of discipline:** Obligatory

Semester: III Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

#### **Annotations:**

The aim of the training course is to create skills and habits for the students to perform functional diagnostics of the locomotor system and to apply the basic means of kinesitherapy by appointment and under the direction of a basic kinesitherapist.

#### KINESITHERAPY IN ORTHOPEDICS AND TRAUMATOLOGY PART II

**ECTS credits:** 4.0 **Hours per week:** 21+0se+0le+2pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: IV Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: ass. prof. Maria Gramatikova, PhD

#### **Annotations:**

In the course the students acquire skills for application of the basic kinesitherapeutic devices for treatment of musculoskeletal system, as well as develop knowledge about the physiological mechanism of their impact. The main methodical rules and strategies for conducting kinesitherapy in postural disturbances, spinal distortions and flatness are studied.

The whole course develops the knowledge and skills of students about the nature, the possibilities and the basic methodological rules for the use of kinesitherapy in postural disturbances, vertebral distortions and flatness. The main methodical rules and strategies of kinesitherapy in orthopedic and traumatology diseases are studied.

The complete course develops the knowledge and skills of students about the nature, the capabilities and the basic methodological rules of kinesitherapy in orthopedic and traumatological diseases. In the end of this course students must be able to:

-Identify and analyze the functional deficiency developed by patients in the course of the disease and the recovery process;

- To know the characteristics of the functional deficiency developed in various diseases of the musculoskeletal system;
- To create a kinesitherapeutic program that is tailored to the particular nosology and individual characteristics of each individual patient;
- To plan the strategy of kinesitherapy during the whole functional-rehabilitation process;
- To select the most effective means of kinesitherapy and to apply an adequate dosage in the course of the daily changing patient functional status.

In practice, they undergo subjective research, objective research, evaluation and planning of kinesiotherapy, in case of impaired function of the locomotor system.

#### SOCIAL MEDICINE, SOCIAL REHABILITATION AND HEALTH PROMOTION

**ECTS credits:** 2.0 **Hours per week:** 21+0se+0le+0pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: III Exam: written

**Supervision:** 

**Department** Medical and Social Sciences

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Ekaterina Mitova, dm

#### **Annotations:**

The curriculum for Social Medicine is in line with the specifics of the specialty "Kinesitherapy" at the Faculty of Public Health, Health Care and Sport at Southwest University "Neofit Rilski" - Blagoevgrad. It is also in line with the new concepts of healthcare reform in Bulgaria. New trends and trends for the preparation of various public health professionals have been taken into account, which by increasing their knowledge and skills in public health can contribute to reducing preventable diseases and disabilities.

The attention of the students of the specialty "Kinesitherapy" will be focused mainly on clarify the subject and the methodology of the social medicine, its integrative character, the complex research methodology, the social factors of health, the contemporary concepts of the individual and public health, the public health indicators, risk factors of healthcare.

Important issues take place in the program, such as the state of the health system, the workings of the main subsystems of the health care organization, the problems of the priority groups of the population and especially the demographic processes in the historical and contemporary aspect, the demographic crisis and the demographic policy, the child population, the state and the health needs of adults. Particular attention is paid to the medical and social problems of the active population, the types of pre-hospital, hospital and post-hospital care, as well as the role of Territorial Expert Medical Commission (TEMC) and

Regional Health Inspectorate (RHI) in the process of health promotion and disability prevention.

#### PATHOKINESIOLOGY – FUNCTIONAL ANALYSIS AND EVALUATION

**ECTS credits:** 4.0 **Hours per week:** 21+0se+0le+2pe

**Evaluation: exam** Kind of discipline: Obligatory

Semester: IV Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

**Lecturers:** assos.prof. Daniela Popova, PhD

assistant Miglena Tsvetkova-Gaberska, PhD

#### **Annotatons:**

The aim of the discipline of pathokinesiology is to provide students with knowledge about the pathokinetic changes in motion of the locomotor system that occur as a result of various pathological conditions. The discipline is the basis for the development of analytical assessment capabilities for pathokinetic changes due to various manifestations of functional deficits. Thus, pathokinesiology is the foundation for the development of in-depth and lasting knowledge in the field of kinesitherapy.

The course develops opportunities for students to perform a patho-kinesiological analysis of various motor activities. In the end of the course students must be able to:

- identify pathological changes in a movement or motor synergy;
- -to determine the nature of the functional pathology and to classify it;
- determine the size and spatial characteristics of the pathological deviation;
- to discover the cause and to establish the mechanism of development of pathology in the movement;
- establish the extent to which pathological abnormalities are useful or not to the whole function of the locomotors system;
- to predict the impact of pathological movements on domestic and occupational activity.

#### INTERNAL DISEASES

**ECTS credits:** 5.0 **Hours per week:** 31+0se+0le+2pe

**Evaluation:** exam **Kind of discipline:** written

Semester: IV Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: Maria Kalpachka, md

#### **Annotations:**

Clinical discipline "Internal Diseases" introduces students to the etiology, pathogenesis, clinic and complications of the most common internal diseases, to modern methods of diagnosis, treatment and prophylaxis of diseases. The subject has an integrative character between the fundamental medical sciences / anatomy, physiology and biochemistry / and the clinical sciences included in the curriculum. The program is built in a way that will lead to an increase in the quality of training to build the kinesitherapist on a contemporary world level.

Theoretical and practical knowledge of internal diseases is based on the ability of the kinesitherapist to work in a stationary environment, to cope independently with prophylactic activity.

In the practical sessions held in the hospital / internal departments of hospital of Blagoevgrad / the students are acquainted with the methods of research and diagnostics of the ill, their real practical treatment during their stay in the hospital and the recommendations for treatment and prophylaxis at home. Practical skills coupled with acquired theoretical knowledge will help build kinesitherapists with a high common medical culture to be equal participants in the treatment teams. The main part of the program is a parallel between lecture material and practical exercises.

#### MASSAGE PART II

**ECTS credits:** 3.0 **Hours per week:** 21+0se+0le+1pe

**Evaluation:** current control **Kind of discipline:** Obligatory

Semester: IV Exam: written

**Supervision:** 

**Department** of Kinesitherapy

**Faculty** of Public Health, Healthcare and Sport

Lecturers: assos. prof. Stamenka Mitova, PhD

Ass. Margarita Avramova, PhD

#### **Annotations:**

The curriculum is devoted to the history of massage, anatomic and physiologic data for individual organs and systems and the impact of massage on it- skin, muscles, joints, blood, lymph and nervous systems, classification of the massage, ways and methods of curative massage. The kinesitherapy training program includes learning and conducting massage (classic and reflective) for individual types of illness. In the various nosologic units the massage technique is different. Massage must be adapted to the specific pathological finding, and it is established by appropriate kinesiological analysis. It deals with massage in traumatic and surgical diseases, diseases of the nervous system, various internal and joint diseases and other diseases. After a brief clinical characterization of the disease and the discovery of the pathological finding, the aims and tasks of the massage are set, the technique is described mainly for the classical and also some of the reflexive massages used in a certain nosology.

#### **SPA THERAPY**

**ECTS credits:** 1.0 **Hours per week:** 0l+0se+0le+1pe

**Evaluation:** written **Kind of discipline:** Elective

Semester: IV Exam: practic

**Supervision:** 

**Department** of Public Health

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Stamenka Mitova, PhD

#### **Annotation:**

Spa therapy (sanus per aquam) is a method of physical therapy for e use of external use of non-mineral water in its various aggregate states with a prophylactic and curative purpose. It is known that water is the main constituent part of living organisms.

People have been using water for prevention and treatment since its earliest development. In our time spa therapy is considered as the main therapeutic tool alongside the other physical methods that make up the healing complex.

The study of spa therapy will be beneficial to all students of specialty "Kinesitherapy" and especially to those who are interested and willing to work in rehabilitation hospitals, spa centers and spa hotels.

#### **AROMATHERAPY**

**ECTS credits:** 1.0 **Hours per week:** 01+0se+0le+1pe

**Evaluation:** exam **Kind of discipline:** Elective

Semester: IV Exam: practic

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Stamenka Mitova, PhD

**Annotation:** 

In the course the students learn the techniques of application and the therapeutic effect of essential oils.

The purpose of the aromatherapy training is to introduce the students to the essence of aromatherapy, its history and professional characteristics, as well as its overall structure.

#### **REFLEXOLOGY**

**ECTS credits:** 1.0 **Hours per week:** 0l+0se+0le+1pe

**Evaluation:** exam Kind of discipline: Elective

**Семестър:** IV **Exam:** practic

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Stamenka Mitova, PhD

**Annotation:** 

Reflexology studies methods of influencing human organisms based on Chinese traditional medicine (KTM). Students get acquainted with the biologically active points (BAT), the meridians where they are located on the body (corporal points), BAT on the auriculum (auriculotherapy) and on the foot (zonotherapy).

# **INFORMATICS**

**ECTS credits:** 1.0 **Hours per week:** 01+0se+0le+1pe

**Evalutaion:** exam **Kind of discipline:** Elective

Semester: IV Exam: written

**Supervision:** 

**Department** of Informatics

**Department** of Electrical engineering, electronics and automation

**Faculty** of Nature and Mathematics

**Faculty** of Technics

Lecturers: Assos. prof. Radoslav Mavrevski, PhD

#### **Annotations:**

Informatics is a science studying methods of structuring, collecting, processing and disseminating data. The achievements of this field are directly and dynamically related to the creation and development of high-tech tools (computers, operating and communication systems, consumer software, application development software, etc.), which are an important tool for all spheres of modern society.

# **CLINICAL PRACTICE PART III**

**ECTS credits:** 7.0 **Hours per week:** 0l+0se+0le+155h. pe

**Evaluation:** current control **Kind of discipline:** Obligatory

Semester: IV Exam: practic

**Supervision:** 

**Department of Kinesitherapy** 

# Faculty of Public Health, Healthcare and Sport

#### **Annotations:**

The aim of the training is to create skills and habits for the students to perform functional diagnostics of the locomotor system, as well as pathokinesiological analysis and kinesitherapy in subjects with vertebral distortions and postural distortions.

## SUMMER CLINICAL PRACTICE PART II

**ECTS credits:** 4.0 **Hours per week:** 01+0se+01e+120h. pe

**Evaluation:** current control **Kind of discipline:** Obligatory

Semester: IV Exam: practice

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

# **Annotation:**

The summer clinical practice aims to enable students under the guidance of the basic kinesitherapist to apply the methods for functional assessment of locomotor system, to define the rehabilitation potential and to perform a patho-kinsiological analysis. Students take a history, check, palpation, goniometry, centimetry, MMT, and also measure pulse rate, reflecting the results in their internship booklet certificated in the department. Under the guidance of the basic kinesitherapist, students prepare kinesitherapeutic programs detailing the objectives, tasks and means of kinesitherapy. It also reflects the indications and contraindications of the particular patient. The aim is to give students the opportunity to apply the knowledge gained in the Kinesitherapy disciplines in orthopedics and traumatology part I and part II, Massage, Pathokinesiology.

## NATURAL TRANSFORMED PHYSICAL FACTORS AND BALNEOLOGY PART I

**ECTS credits:** 3.0 **Hours per week:** 21+0se+0le+1pe

Evaluation: current control Kind of discipline: задържителна

**Semester:** V **Exam:** written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: Aicha Zaralieva, md

**Annotations:** 

In many diseases, kinesitherapy is combined with physiotherapeutic agents, and their beneficial influence increases. This requires that kinesitherapy specialists know very well the nature and the influence of natural and transformed physical factors in order to be able to successfully combine kinesitherapy with them in their future activities.

In recent years, physical medicine and rehabilitation have become increasingly widespread. Physical medicine is a science for the application of the physical factors - natural and artificial, with prophylactic, curative and rehabilitative purpose.

Physical medicine is pathogenetically grounded. It is part of the complex therapy of various clinical specialties. Physical devices used for therapy purposes have no side effects but, on the contrary, especially natural factors, have a training activity applied in physioprophylaxis. Physical medicine is also advantageous in economic terms. This makes it an independent choice for prevention, treatment and rehabilitation.

Students should be acquainted with the following sections of physical medicine and rehabilitation: electrotherapy, light therapy, thermal therapy, resort treatment / balneotherapy and climatotherapy / and special physiotherapy.

## KINESITHERAPY IN INTERNAL DISEASE

**ECTS credits:** 6.0 **Hours per week:** 4l+0se+0le+2pe

**Evaluation: exam** Kind of discipline: Obligatory

**Semester:** V **Exam:** written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Mariela Filipova, PhD

Ass. Krasimira Zlatkova, PhD

The discipline "Kinesitherapy in Internal Diseases" studies the kinesitherapeutic strategy in the most common diseases. The course includes study of internal diseases - cardiovascular, lung diseases, and others. Learned material includes, a special place is devoted to kinesitherapy in social diseases.

## **NEUROLOGICAL DISEASES**

**ECTS credits:** 6.0 **Hours per week:** 31+0se+0le+3pe

**Evaluation: exam** Kind of discipline: Obligatory

Semester: V Exam: written

**Supervision:** 

**Department of Public Health** 

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Rosen Kalpachki, PhD, md

#### **Annotations:**

Neurology studies the functional relationships between the individual nervous-brain structures and the disorders that arise from their impairment. The main neurological units are studied - their etiology, pathogenesis, epidemiology, course and principles of therapeutic behavior. It emphasizes the knowledge required in practice for the specialist - kinesitherapist in communicating with patients with neurological diseases.

## MANUAL MOBILIZATION OF PERIPHERAL JOINTS

**ECTS credits:** 3.0 **Hours per week:** 21+0se+0le+1pe

**Evaluation: exam** Kind of discipline: Obligatory

**Semester:** V **Exam:** written

**Supervision:** 

**Department of Kinesitherapy** 

Faculty of Public Health, Healthcare and Sport

Lecturers: prof. Nikolay Popov, dn

The discipline includes the main theoretical principles and methods for practical application of techniques for mobilization of the peripheral joints. It proceeds from the fundamental principles of manual therapy, the kinesiological and pathokinesiological features of the peripheral joints. The emphasis is on the integration of the acquired knowledge and skills in the complex construction of a kinesitherapeutic program.

#### **PEDIATRICS**

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation: exam** Kind of discipline: Obligatory

Semester: V Exam: written

**Supervision:** 

**Department** Medical and Spcial Sciences

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Ekaterina Mitova, PhD

## **Annotations:**

This course aims to broaden the specialized training of students - kinesitherapists to work with children. The program includes getting acquainted with the most common acute and chronic illnesses because of the fact that these patients often require prolonged and purposeful social care.

Envisioned and wider familiarization with the epidemic process and infectious diseases due to the fact that some of them are defined as typical for children. Special topics address parasitic diseases and first aid opportunities in emergency and emergency situations.

## **MASSAGE PART III**

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: V Exam: written

**Supervision:** 

**Department of** Kinesitherapy

**Faculty of** Public Health, Healthcare and Sport

Lecturers: assos. prof. Stamenka Mitova, PhD

Ass. Margarita Avramova, phD

#### **Annotations:**

The curriculum is devoted to the history of massage, anatomic and physiologic data for individual organs and systems and the impact of massage on it- skin, muscles, joints, blood, lymph and nervous systems, classification of the massage, ways and methods of curative massage. The kinesitherapy training program includes learning and conducting massage (classic and reflective) for individual types of illness. In the various nosologic units the massage technique is different. Massage must be adapted to the specific pathological finding, and it is established by appropriate kinesiological analysis. It deals with massage in traumatic and surgical diseases, diseases of the nervous system, various internal and joint diseases and other diseases. After a brief clinical characterization of the disease and the discovery of the pathological finding, the aims and tasks of the massage are set, the technique is described mainly for the classical and also some of the reflexive massages used in a certain nosology.

## SPORT - HEALING SWIMMING

**ECTS credits:** 0.0 **Hours per week:** 01+0se+0le+2pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: V Exam: practical

**Supervision:** 

**Department of Sport** 

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Daniela Lekina, PhD

#### **Annotations:**

The program for the sports discipline "Healing Swimming" is designed for the students of specialty Kinesitherapy. The program envisages the study of elements of swimming techniques, mastering the techniques of swimming styles, acquiring the knowledge and skills necessary for the formation of complex competencies in the students, allowing to efficiently carry out organizational and methodological-practical activities for swimming activities of people with diseases of the cardiovascular system, locomotor trauma, scoliosis, etc. of different gender and age.

In accordance with the Curriculum, the course "Healing Swimming" is taught in the fifth semester. The classes take place in the form of practical exercises. The learning process is based on the individual peculiarity of each student, the methodological sequence and all pedagogical principles and methods are respected in order to achieve maximum success in the learning process.

#### **SPORT - BASKETBALL**

**ECTS credits:** 0.0 **Hours per week:** 01+0se+01e+2pe

**Evaluation:** exam **Kind of discipline:** Elective

Semester: V Exam: practical

**Supervision:** 

**Department of Sport** 

Faculty of Public Health, Healthcare and Sport

Lecturers: ass. Nikolay Hadziev, PhD

#### **Annotations:**

The proposed curriculum looks at the main directions in the basketball teaching methodology. Teaching is the most difficult and intricate element of the basketball learning process. It can only take place when the correct methodology is known and applied.

The basic concepts and classification of the technique and tactics of the basketball game, including the correct mastery of the technique of a ball less player (basketball, walking, running, braking, reversing, pivoting, jumping, false movements), ball player technique, shooting, guiding, shooting in the basket, false movements, basketball) and individual, group and team tactical acts of attack and protection.

#### SPORT - TENNIS

**ECTS credits:** 0.0 **Hours per week:** 0l+0se+0le+2pe

**Evaluation:** exam **Kind of discipline:** Elective

Semester: V Exam: practical

**Supervision:** 

**Department of Sport** 

**Faculty of** Public Health, Healthcare and Sport

Lecturers: assos. prof. Dimitar Tomov, PhD

#### **Annotations:**

The curriculum is intended for students of Kinesitherapy specialty who have chosen the sport discipline of tennis. The curriculum provided in the program should give students the knowledge necessary for successful professional activity as kinesitherapists. Students will also form knowledge about the practice of wheelchair tennis, which is very popular in the world and in Bulgaria.

## **SPORT - ATHLETICS**

**ECTS credits:** 0.0 **Hours per week:** 01+0se+0le+2pe

**Evaluation:** exam **Kind of discipline:** Elective

**Semester:** V **Exam:** practical

**Supervision:** 

**Department of Sport** 

Faculty of Public Health, Healthcare and Sport

Lecturers: Ch. assistant Anton Manchev, PhD

### **Annotations:**

The course of Athletics gives knowledge and forms practical skills for:

- Techniques of the most accessible and most widely used athletics exercises for recreational and mass-healing activities
- Mastery of specific athletics and methods to develop physical qualities
- use of appropriate athletic exercises for curative-restorative procedures
- load control in the application of athletics exercises

The universal nature of these exercises enables prospective kinesitherapists to supplement their arsenal of physical exercises of a different nature and load orientation in order to be used as restorative or therapeutic means. This is a prerequisite for forming the necessary motor potential, enriching the professional look of the future kinesitherapist.

## **CLINICAL PRACTICE PART IV**

**ECTS credits:** 8.0 **Hours per week:** 01+0se+01e+180 astr. h pe

**Evaluation:** current control **Kind of discipline:** Obligatory

Semester: V Exam: practical

**Supervision:** 

**Department of Kinesitherapy** 

Faculty of Public Health, Healthcare and Sport

#### **Annotations:**

The purpose of learning practice is to create skills and habits for students to functionally study and apply kinesitherapy to patients. In clinical conditions students apply the knowledge gained during lectures and exercises in kinesitherapy in neurological and mental diseases, as well as kinesitherapy in surgery.

## KINESITHERAPY IN NERVOUS AND MENTAL DISEASES PART I

**ECTS credits:** 4.0 **Hours per week:** 21+0se+0le+2pe

**Evaluation: current control** Kind of discipline: Obligatory

Semester: VI Exam: written

**Supervision:** 

**Department of Kinesitherapy** 

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Mariela Filipova, PhD

Ass. Krasimira Zlatkova, PhD

# **Annotations:**

The discipline "Kinesitherapy in Nervous and Mental Diseases" studies kinesitherapy in the most common neurological and psychiatric diseases. The course of teaching (theoretical and practical) involves the acquisition of knowledge and practical skills in the field of neurology - stroke, diseases of the peripheral nervous system, degenerative nervous system disorders, hereditary diseases, etc. In the studied material, a special place is devoted to kinesitherapy in social and significant diseases.

# NATURAL, TRANSFORMED PHYSICAL FACTORS AND BALNEOLOGY PART II

**ECTS credits:** 3.0 **Hours per week:** 2l+0se+0le+1pe

**Evaluation: current control Kind of discipline:** Obligatory

Semester: VI Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: Aicha Zaralieva, md

#### **Annotations:**

In many diseases, kinesitherapy is combined with physiotherapeutic agents, and their beneficial influence increases. This requires that kinesitherapy specialists know very well the nature and the influence of natural and transformed physical factors in order to be able to successfully combine kinesitherapy with them in their future activities.

In recent years, physical medicine and rehabilitation have become increasingly widespread. Physical medicine is a science for the application of the physical factors - natural and artificial, with prophylactic, curative and rehabilitative purpose.

Physical medicine is pathogenetically grounded. It is part of the complex therapy of various clinical specialties. Physical devices used for therapy purposes have no side effects but, on the contrary, especially natural factors, have a training activity applied in physioprophylaxis. Physical medicine is also advantageous in economic terms. This makes it an independent choice for prevention, treatment and rehabilitation.

Students should be acquainted with the following sections of physical medicine and rehabilitation: electrotherapy, light therapy, thermal therapy, resort treatment / balneotherapy and climatotherapy / and special physiotherapy.

## KINESITHERAPY IN OBSTETRICS AND GYNECOLOGY

**ECTS credits:** 2.0 **Hour per week:** 11+0se+0le+1pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: VI Exam: written

**Supervision:** 

**Department** Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: Assos. prof. Stamenka Mitova, PhD

Ass. Margarita Avramova, PhD

Kinesitherapy is used successfully in obstetrics and gynecology. It is used in pregnant women and mothers and contributes to the good bearing of the pregnancy, the normal course of birth and the regeneration of the woman. It is also very good in gynecological diseases and operations. The discipline is absolutely necessary for students of kinesitherapy.

## FUNDAMENTS OF SCIENTIFIC RESEARCH

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation: exam** Kind of discipline: Obligatory

Semester: VI Exam: written

**Supervision:** 

**Department of Informarics** 

**Faculty of** Nature Mathematics Faculty

**Lecturers:** ass. prof. Vera Veleva, PhD

#### **Annotations:**

The necessity of scientific research in each field and the assessment of the quality of these are the purpose of the proposed discipline. The aim is to give students knowledge of the general theory of research and the application of statistics in kinesitherapy. Training in the proposed program requires computer skills and knowledge of English ("Subject English").

## KINESITHERAPY IN CHILD DISEASES

**ECTS credits:** 3.0 **Hours per week:** 21+0se+0le+1pe

**Ecaluation:** exam **Kind of discipline:** Obligatory

Semester: VI Exam: written

**Supervision:** 

**Department of Medical and Scientific Sciences** 

**Department of Kinesitherapy** 

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Maria Gramatikova, PhD

#### **Annotations:**

In childhood, kinesitherapy plays a particularly important role. On the one hand it stimulates the healing processes and on the other contributes to the proper psycho-physical development. In case of children with deviations in health and physical development, kinesitherapy offers a full range of rehabilitation resources.

Kinesitherapy is an integral part of the complex treatment of childhood illnesses. As a general reinforcement and developmental stimulant, gymnastics and massage in babyhood are widely used and are consistent with principles of kinesitherapy.

The methodology of kinesitherapy in pediatric diseases has a number of peculiarities, and mainly in this age period it must take into account the degree of psychomotor development of the child. Its goals and tasks are not only the therapeutic response to the pathological processes but also the normal physical and mental development as well as the correct mastery of the primitive motor habits and skills of the children.

#### KINESITHERPAY IN GERIATRICS

**ECTS credits:** 1.0 **Hours per week:** 11+0se+0le+0pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: VI Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos.prof. Mariela Filipova, PhD

#### **Annotations:**

Kinesitherapy used in geriatrics and gerontology has an outstanding health and social significance. It is used equally well in healthy and sick adults and elderly people. Kinesitherapy in geriatrics and gerontology has as its main purpose and task the prevention, strengthening and tempering of the aging organism. Exercise and sport tourism are designed to slow down and stop the inexorable hospital processes of aging and to keep as long as possible the physical activity and the ability of the elderly and old man and not depend on society and relatives. In addition to old age, there are some typical diseases of this period of life. They are treated according to the appropriate kinesitherapy methodology, which is adapted to the age and kinesitherapeutic potential of the individual.

#### **ERGOTHERAPY**

**ECTS credits:** 2.0 **Hours per week:** 21+0se+0le+0pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: VI Exam: written

**Supervision:** 

**Department** Medical and Social Sciences

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Ekaterina Mitova, PhD

Assos. prof. Yulian Zlatkov, PhD

#### **Annotations:**

The program is designed for students of specialty "Kinesitherapy". He acquainted with the main theoretical concepts of ergo therapy. The role of the therapist in his working with children at risk, their families as well as specific diseases is considered. Emphasis is placed on working in a multidisciplinary team and the ability to adapt the environment. Deviations from normal neuropsychological development are also considered due to various injuries and as a result of the harmful effects of the physical and social environment as well as the possibilities for their adaptation.

# ADAPTED PHYSICAL ACTIVITY

**ECTS credits:** 2.0 **Hours per week:** 21+0se+0le+0pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: VI Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Stamenka Mitova, PhD

#### **Annotations:**

The course "Adapted Physical Activity" is related to the acquisition of a wide range of knowledge and skills about the emergence, development, basic means and the technology of the adapted physical activity. It gives students a scientifically well-grounded knowledge of its

social importance, the scientific basis for the selection of the means and the methodology of their application. The lectures course acquainted with the importance of adapted physical activity regarding restoration and realization in the life of people with disabilities.

The course is included in the curriculum of the specialty "Kinesitherapy" for the third semester (VI semester) as compulsory.

#### MOTION RHYTHM AND DANCE

**ECTS credits:** 1.0 **Hours per week:** 01+0se+0le+1pe

**Evaluation:** exam **Kind of discipline:** Elective

Semester: VI Exam: practical

**Supervision:** 

**Department** Choreography

**Faculty** Arts

Lecturers: assistant Daniela Manikatova

#### **Annotations**

The course "Motor Rhythm and Dance" contains a general overview of Bulgarian dance folklore. Historical information about Bulgarian folk dances is given. Elements, movements, dancing exercises, folk dance from all ethnographic areas are studied. Students are acquainted with the rich and unique rhythmic diversity of the Bulgarian folk dances, the style and the character of their performance, and last but not least with the all-round impact of the dancing on the human organism (physiological, psychic, educational etc.).

- The physiological effect is expressed in the effects of dances on the body and its systems cardiovascular and respiratory; the motor apparatus; vestibular apparatus; hearing analyst, and so on.
- The dangers of dancing on the body are expressed in their effects on the nervous system and the human psyche feelings, moods, emotions, thinking, and memory.
- Educational impact is expressed in the influence of dancing on the psycho-physiological state of the dancers, teaches them in harmonious and coordinated knowledge of their body and emotions, educates aesthetic taste, etc.

In addition, the Kinesitherapy specialist should be very familiar with the problems of rehabilitation. This is due to the fact that Kinesitherapeutic means and methods can successfully solve or assist in solving the main tasks of rehabilitation - motor, emotional, biological, psychological and social.

## **BALNEOLOGICAL TOURISM**

**ECTS credits:** 1.0 **Hours per week:** 0l+0se+0le+1pe

**Evaluation:** exam **Kind of discipline:** Elective

Semester: IV Exam: written

**Supervision:** 

**Department** of Public Health

Faculty of Public Health, Healthcare and Sport

Lecturers: ass. Aicha Zralieva, MD

## **Annotations:**

The great chance and challenge of Bulgarian spa tourism is to take advantage of its strengths in this big industry. Balneological tourism in Bulgaria develops on the basis of various and numerous mineral waters. About 100 are municipalities that have a total of over 250 mineral water deposits and healing muds with over 500 minerals or drillings.

In the country, a broad resort spa has been established, part of which is or is close to world standards. Balneo-hotels work with highly qualified cadres - namely kinesitherapists. This gives a great advantage to our specialized balneological establishments in the realization of balneological tourism. Therefore, the study of "balneological tourism" is necessary and especially useful for students of kinesitherapy.

## **FITBALL**

**ECTS credits:** 1.0 **Hours per week:** 01+0se+0le+1pe

**Evaluation: exam**Kind of discipline: Elective

Semester: VI Exam: practic

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Stamenka Mitova, PhD

The Fitball course introduces students to a new and original gymnastics that can be used in kinesitherapy. Its effect is to strengthen the muscles of the back and abdomen, shoulder belt and lower limbs. Inflatable soft balls JIMNIK are used as well as terrasensor, overball, softball and more. It does not load large joints, has a good cardio-circulatory effect. It does not cause stress and is safe, enjoyable and easy to perform.

Emphasis is placed on the correct practical implementation of the complexes of nosological units. Contraindications for the application of this gymnastics. During the practical exercises attention is paid to the correct selection of exercises and their combination depending on the kinesitherapeutic methodology for making a complex, the choice of a suitable ball or exercise strip. The discipline aims to reveal new possibilities for overcoming specific clinical problems.

## MANUAL THERAPY

**ECTS credits:** 1.0 **Hours per week:** 0l+0se+0le+1pe

**Evaluation: exam** Kind of discipline: Elective

Semester: VI Exam: practic

**Supervision:** 

**Department** of Kinesitherapy

**Facutly** of Public Health, Healthcare and Sport

Lecturers: assos. prof. Stamenka Mitova, PhD

#### **Annotations:**

To present to the kinesitherapists the main theoretical and practical constructions of manual mobilizations for peripheral joints. Students should know the indications and contraindications for all manual-mobilization techniques. To present the main concepts of the clinical refinement process in terms of research and treatment with soft tissue and mobilizing manual methods. Students learn to think over the particular lesion and develop a kinesitherapeutic program with the most appropriate passive and active means.

## BASIC TESTING TOOLS IN NEUROLOGY AND NEUROSURGERY

**ECTS credits:** 1.0 **Hours per week:** 0l+0se+0le+1pe

**Evaluation: exam** Kind of discipline: Elective

Semester: VI Exam: practic

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Yulian Zlatkov, PhD

**Annotations:** 

The discipline "Basic Testing Tools in Neurology and Neurosurgery" is a discipline that supports the training of students in kinesitherapy in the classical and latest methods of neurology research. The course of teaching (practical) involves the use of test batteries for the study of diseases of social significance / brain stroke, diseases of the peripheral nervous system, degenerative nervous system diseases, hereditary diseases, etc.

# CLINICAL PRACTICE PART V

**ECTS credits:** 6.0 **Hours per week:** 0l+0se+0le+135astr. h. pe

**Evaluation:** current control **Kind of discipline:** Obligatory

Semester: VI Exam: practic

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

**Annotations:** 

The purpose of learning practice is to create skills and habits for students to functionally study and apply kinesitherapy to patients. In clinical situation the knowledge gained during the lectures and kinesitherapy exercises in nerve and mental diseases, kinesitherapy in surgery.

# SUMMER CLINICAL PRACTICE PART III

**ECTS credits:** 4.0 **Hours per week:** 0l+0se+0le+120astr. h. pe

**Evaluation: exam** Kind of discipline: Obligatory

Semester: VI Exam: practic

# **Supervision:**

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

#### **Annotations:**

The summer clinical practice aims to enable students under the guidance of the tutor to apply the methods for functional assessment of the locomotor system and to determine the rehabilitation potential of the patients. Students take a history of examination, palpation, goniometry, centimetry, MMT, and also they measure pulse rate, reflecting the results in their internship booklet, certificated in the study department. Under the guidance of the base kinesitherapist, the students prepare their kinesitherapeutic programs detailing the objectives, tasks and means of kinesitherapy. It also reflects the indications and contraindications of the particular patient. The aim is to give students the opportunity to apply the knowledge gained in the disciplines like Kinesitherapy in Orthopedics and Traumatology part I and part II, Massage, Pathokinesiology, Kinesitherapy in Child Diseases, Kinesitherapy in Nervous and Mental diseases, Kinesitherapy in Geriatrics, Kinesitherapy in Obstetrics and Gynecology, Natural Transformed Physical Factors.

## KINESITHERAPY IN NERVOUS AND MENTAL DISEASES PART II

**ECTS credits:** 6.0 **Hours per week:** 21+0se+0le+2pe

**Evaluation: exam** Kind of discipline: Obligatory

Semester: VII Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Maria Gramatikova, PhD

Ass. Margarita Avramova, PhD

## **Annotations:**

The discipline "Kinesitherapy in Nervous and Mental Diseases" studies kinesitherapy in the most common neurological and psychiatric diseases. The course of teaching (theoretical and practical) involves the acquisition of knowledge and practical skills in the field of neurology - stroke, diseases of the peripheral nervous system, degenerative nervous system disorders, hereditary diseases, etc. In the studied material, a special place is devoted to kinesitherapy in social and significant diseases.

## KINESITHERAPY IN SURGERY

**ECTS credits:** 5.0 **Hours per week:** 31+0se+0le+2pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: VII Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Maria Gramatikova, PhD

#### **Annotations:**

Kinesitherapy is successfully applied in surgical practice. It is an essential part of the preoperative preparation of the patients as well as in their post-operative recovery. The discipline is absolutely necessary for students of kinesitherapy.

# THEORY AND METHODOLOGY OF PHYSICAL EDUCATION AND SPORTS TRAINING

**ECTS credits:** 1.0 **Hours per week:** 11+0se+0le+0pe

**Evaluation:** exam Kind of discipline: Obligatory

Semester: VII Exam: written

**Supervision:** 

**Department** of Theory and Methodology of Physical Education

Faculty of Pedagogy

Lecturers: assos. prof. Daniela tomova, PhD

Ch. Ass. Ilia Kanelov, PhD

## **Annotations:**

The curriculum for the discipline "Theory and Methodology of Physical Education and Sports Training" gives knowledge about the theoretical foundations of physical education, physical development, motor skills and the health direction of intense physical activity. Emphasis is

placed on the need to overcome obsolete concepts and to introduce new ideas enriching the theoretical and methodological-practical preparation of students. The theory and methodology of physical education and sports training is a scientific discipline that studies the norms of physical education as a learning-educational and educational-healing process.

Innovative projects and solutions are being considered that lead to a change in the paradigm of physical education and to actual reconstruction rather than partial adaptation in the field of sport and physical education and the connection with kinesitherapy. The curriculum identifies shortcomings in the education system on the one hand, and on the other hand the establishment of a critical mass of ideas in the university and professional circles that have become a desirable solution to the identified problems.

The discipline is included in the curriculum of "Kinesitherapy" for IV course (VII semester) as obligatory.

# MUSCLE TECHNIQUES AND MOBILIZATIONS OF PERIPHERAL NERVES

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation: exam** Kind of discipline: Obligatory

Semester: VII Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: prof. NikolayPopov, dpn

#### **Annotations:**

The discipline studies the main theoretical principles and methods for practical application of muscle techniques and neurodynamics tests. It proceeds from the fundamental principles of manual therapy, the kinesiological and pathocinesiological features of the muscular action and the mechanical characteristics of the peripheral nerves. The emphasis is on the integration of the acquired knowledge and skills in the complex construction of a kinesitherapeutic program.

#### SOCIAL AND HEALTH LEGISLATION

**ECTS credits: 1**.0 **Hours per week:** 11+0se+0le+0pe

**Evaluation: exam** Kind of discipline: Obligatory

Semester: VII Exam: written

**Supervision:** 

**Department** of Public Legal Sciences

**Faculty** of Low

Lecturers: Assoc. Prof. Dr. Hristo Banov

**Annotations:** 

The subject "Social and Health Legislation" aims at forming students' basic knowledge of the content of basic legal acts (laws and regulations, including acts of international law) applicable to the regulation of public relations related to the health and health insurance of citizens, as well and the basic aspects of their social rights.

The discipline studied also aims to form knowledge and skills in students, enabling them to independently work with legal normative acts relevant to the scope of social and health legislation.

# NATURAL, TRANSFORMED PHYSICAL FACTORS AND BALNEOLOGY PART III

**ECTS credits:** 6.0 **Hours per week:** 31+0se+0le+2pe

**Evaluation:** exam **Kind of discipline:** Obligatory

Semester: VII Exam: written

**Supervision:** 

**Department** Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: Aicha Zaralieva, md

## **Annotations:**

In many diseases, kinesitherapy is combined with physiotherapeutic agents, and their beneficial influence increases. This requires that kinesitherapy specialists know very well the nature and the influence of natural and transformed physical factors in order to be able to successfully combine kinesitherapy with them in their future activities.

In recent years, physical medicine and rehabilitation have become increasingly widespread. Physical medicine is a science for the application of the physical factors - natural and artificial, with prophylactic, curative and rehabilitative purpose.

Physical medicine is pathogenetically grounded. It is part of the complex therapy of various clinical specialties. Physical devices used for therapy purposes have no side effects but, on the contrary, especially natural factors, have a training activity applied in physioprophylaxis.

Physical medicine is also advantageous in economic terms. This makes it an independent choice for prevention, treatment and rehabilitation.

Students should be acquainted with the following sections of physical medicine and rehabilitation: electrotherapy, light therapy, thermal therapy, resort treatment / balneotherapy and climatotherapy / and special physiotherapy.

# **DEFECTOLOGY**

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation:** exam Kind of discipline: Elective

Semester: VII Exam: written

**Supervision:** 

**Department** of Public Health

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Stamenka Mitova, PhD

## **Annotations:**

The course presents modern approaches and techniques for mobilization stretching as a means of restoring and maintaining optimal joint mobility, muscle elasticity and functional balance. The physiological foundations of stretching, methods of dosage and safety of application, as well as its integration into rehabilitation and training programs are examined. The aim of the training is to prepare students for the effective use of mobilization stretching as part of the kinesitherapy process in various diseases and functional disorders, as well as for the prevention of injuries.

## SPELLING AND PRONUNCIATION

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation:** exam Kind of discipline: Elective

Semester: VII Exam: written

**Supervision:** 

**Department** of Bulagrian Lenguage

**Faculty** of Filology

Lecturers: assos. prof. Lachezar Perchekliiski, PhD

#### **Annotations:**

The course, which includes 30 hours of lectures (15 lectures and 15 exercises) and 30 hours of outside self-preparation, introduces the students to the main spelling, grammatical and normative norms in the Bulgarian literary language, more important of which are:

- capitalization;
- the spelling of the variable sounds;
- fusion, semi-spirited and split writing;
- writing a double n, a double t, a double d, etc;
- writing the or a/ an;
- punctuation in the simple and complex sentence, etc.

Students study the peculiarities of some written science-style genres (abstract, final course work, research) that have application in the learning process. During the exercises and out-of-the-course work, they learn to write their own scientific texts, solve language tests and case studies, express and substantiate their own.

## KINESITHERAPY IN SPORT PRACTICE

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation:** exam **Kind of discipline:** Elective

Semester: VII Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Maria Gramatikova, PhD

# **Annotations:**

The course "Kinesitherapy in Sport Practice" introduces the students to the periods of sports training, their essence and peculiarity. Students acquire knowledge and skills to apply specialized methods and means of kinesitherapy to restore athletes to common sports injuries. Familiarize with the specifics of traumatism in soccer players, skiers, martial arts, athletes and others in order to prevent injuries doing the sport.

# **ORTHOPEDIC DIAGNOSIS**

**ECTS credits:** 2.0 **Hour per week:** 11+0se+0le+1pe

**Evaluation:** exam **Kind of discipline:** Elective

Semester: VII Exam: written

**Supervision:** 

**Departmet** of Healthcare

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Manol Kalniev, PhD, MD

#### **Annotations:**

Orthopedic diagnosis is a discipline that gives the knowledge necessary to understand the static and functional status of the patient. It presents the basics of appropriate documentation. Students are acquainted with different diagnostic methods used in orthopedics - orthopedic tests, neurological diagnostics, pediatric, imaging and other, whose value and indications are well known in orthopedics.

The full course of training develops the students' knowledge of the essence of the medical documentation, including: history, systemic patient study and advanced diagnostics (MRT, CT, ultrasound, arthrography, X-ray, etc.)

Upon completion of the training, students should have mastered in general the physical, radiological and advanced diagnostics of joints in the locomotor system, in various orthopedic diseases of the human being.

## KINESIOTAPING

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation: exam** Kind of discipline: Elective

Semester: VII Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Maria Gramatikova, PhD

In the course the students acquire the skills to apply different methods of kinesiotaping, depending on the functional analysis and evaluation of the dysfunctions. They acquire knowledge about the physiological mechanism of the effects of different kinesiology applications and methods. The overall course develops the knowledge and skills of students about the essence, the possibilities and the basic methodological rules for the application of kinesiotaping and its combination with the other means of the kinesitherapeutic program.

#### SPORTS MEDICINE

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation: exam** Kind of discipline: Elective

Semester: VII Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: ass. Margarita Avramova, PhD

## **Annotations:**

The discipline examines the application of the yoga and Pilates systems as effective methods for improving motor activity, breathing, posture and psycho-emotional balance. They are studied in the context of kinesitherapy - as complementary means for prevention, treatment and rehabilitation of various diseases and functional disorders. The aim of the training is to form knowledge and practical skills for using yoga and Pilates exercises in a therapeutic and rehabilitation environment, with a view to increasing the physical condition, flexibility, muscle control and overall health of the patient.

# PROGRESSIVE PROPRIOCEPTIVE TRAINING

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation: exam** Kind of discipline: Elective

Semester: VII Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Maria Gramatikova, PhD

Ass. Miglena Tsvetkova-Gaberska, PhD

#### **Annotations:**

In the course, the bachelors acquire knowledge, skills, and competencies to apply perceptive training and combine it with the other kinesitherapy tools in the healing programs. Students acquire skills for applying different means of pro-receptive training in progression, depending on the functional analysis and assessment of dysfunctions. They gain knowledge about the physiological mechanism of impact.

Students are introduced to the selection and dosing of resources for targeted impacts. Prepare kinesitherapy programs. It is studied how the prevention of sports injuries, practiced sports and biomechanics and their pathobiomechanics are studied by means of a pro-inductive training.

#### INNOVATIONS IN TECHNOLOGY USED IN KINESITHERAPY

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation:** exam **Kind of discipline:** Elective

Semester: VII Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Yulian Zlatkov, PhD

## **Annotations:**

In the course, the bachelors acquire knowledge, skills and competences for innovation in kinesitherapy technologies and combine other kinesitherapy therapies into the healing programs. Students acquire skills, knowledge and competences for the latest and advanced technologies used in kinesitherapeutic practice. They acquire knowledge about the use and deployment of innovations in different aspects, such as aesthetic physiotherapy.

Students are introduced to the selection and dosing of various types of most actual equipment. It is explored how through the innovations in kinesitherapy technology can be helped the healing process.

## ISOKINETIC DYNAMOMETRY

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation: exam** Kind of discipline: Elective

Semester: VII Exam: written

**Supervision:** 

**Department** of Anatomy and physiology

Faculty of Public Health, Healthcare and Sport

Lecturers: prof. Miglena Tsvetkova-Gaberska, PhD

## **Annotations:**

The course offers the knowledge and skills of the Kinesitherapy students on an innovative methodology, which is applied in modern rehabilitation and kinesitherapy centers, as well as in foreign university structures, where specialties such as kinesitherapy, physical therapy, rehabilitation, sports, kinesiology and others. This methodology is recognized as a reference method and a gold standard for dynamometric measurements. The main objectives of the isokinetic dynamometry course are:

- to present the role of skeletal muscles to human movement and to generate different types of force in the context of subcellular structural organization of muscles and types of muscle contractions;
- to characterize the dynamometer as a force measurement methodology, as well as the parameters related to it work, power, etc;
- to present the methodology of isokinetic dynamometry for assessment of muscle performance and muscle function;
- to present the parameters that are measured and calculated by isokinetic dynamometry;
- to give a detailed account of the research and applied aspects of isokinetic dynamometry in clinical and sports practice, rehabilitation, kinesitherapy, kinesiology,

The training on the proposed program requires knowledge of anatomy, physiology of physical exercise, biomechanics and others. Computer skills and command of English are of great importance.

# **CORRECTIVE GYMNASTICS**

**ECTS credits:** 2.0 **Hours per week:** 11+0se+0le+1pe

**Evaluation: exam** Kind of discipline: Elective

Semester: VII Exam: written

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

Lecturers: assos. prof. Stamenka Mitova, PhD

## **Annotations:**

The Curriculum of Corrective Gymnastics for Kinesitherapists is tailored to the specifics of their activity and educational attainment. The subject gives knowledge and builds skills for preparation of systematized and purposeful physical exercises for application of the basic kinesitherapeutic devices for influence on the musculoskeletal, as well as develops knowledge about the physiological mechanism of their impact. The basic methodical rules and strategies for conducting kinesitherapy are studied in:

- Spinal distortion;
- Traumas and illnesses that caused a disruption of the stand;
- Stayed and immobilized;
- Pain of the waist, back and neck;
- Initial forms of disc herniation;
- Pain after overload and need for an adapted load;
- Pregnancy and postpartum period.

The overall course develops the knowledge and skills of students about the nature, the possibilities and the basic methodological rules for the use of kinesitherapy in postural disturbances, vertebral distortions and flatness.

# CLINICAL PRACTICE PART VI

**ECTS credits:** 7.0 **Hours per week:** 01+0se+0le+155astr. h pe

**Evaluation: exam** Kind of discipline: Obligatory

Semester: VII Exam: practic

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

The aim of the training course is to create skills and habits in students for functional research and application of kinesitherapy in pediatrics and geriatrics. Clinical conditions apply to the knowledge gained during lectures and kinesitherapy exercises.

# PRE-GRADUATE INTERNSHIP

**ECTS credits:** 20.0 **Hours per week:** 01+0se+01e+600astr. h pe

**Evaluation: exam** Kind of discipline: Obligatory

Semester: VII Exam: practic

**Supervision:** 

**Department** of Kinesitherapy

Faculty of Public Health, Healthcare and Sport

#### **Annotations:**

The pre-graduate internship enables students to independently plan, organize and implement the entire treatment and recovery process with the means and methods of kinesitherapy. The aim of the internship is to consolidate and apply in practice the knowledge and skills for functional diagnostics of patients, with a view to correctly preparing a kinesitherapy program. To improve the skills for compiling kinesitherapy programs depending on the disease, the periods and stages of treatment, and the implementation of specific scientific and research tasks.

#### **GRADUATION:**

1. Unified State Exam on the Fundamentals and Means of Kinesitherapy and its Application in Various Diseases and Injuries - Theory and Practice

ECTS credits: 10.0

**Evaluation:** exam **Exam:** written

**Semester:** VIII