



Technological
Educational Institute of
Athens (TEI- A)
Faculty of Health and
Caring Professions
Physiotherapy Department



CURRICULUM COURSE DESCRIPTION

Implementation Period: October 2000 – July 2009

Editing: Professor Eirini Grammatopoulou

Address: Mitrodorou 24, Athens 10441, Greece
Admissions phone number: +302105387485
<http://www.teiath.gr/seyp/physiotherapy/>
e-mail: teiaphysio@teiath.gr

1st SEMESTER

	1 st Semester	CC		Lec	Lab	Total	WL	ECTS
1.	Anatomy	C	M	4	2	6	210	7
2.	First Aid	C	M	1	2	3	75	5
3.	Epidemiology – Public Health	C	M	2		2	90	4
4.	Ethics in Physiotherapy	C	M	2		2	90	4
5.	Psychology	AELH	M	2		2	90	5
6.	Kinesiology I	S	M	2	2	4	120	5
	Total			13	6	19	675	30

Abbreviations

CC = Course Category, AELH=Administration, Economics, Legislation and Humanities modules, C=Core Modules, S=Special Courses, SC= Specialization Courses]

E = Elective Courses, M = Mandatory Courses, Lec = Lecture hours per week,

Lab = Laboratory hours per week, WL = Workload hours per semester

COURSE TITLE	ANATOMY
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Core Module (C)
WEEKLY TEACHING HOURS	6 (Theory 4, Laboratory 2)
ECTS	7
ACADEMIC SEMESTER	1 st

COURSE DESCRIPTION:

General anatomy: Cells and tissues, organs, systems and parts of the human body.
 Osteology: spine, upper and lower extremities, ligaments and joints of body parts and members.
 Muscular system: Types, properties, actions of muscles. Muscles of face, head, neck, chest, back, abdomen, upper and lower extremities.
 Other systems: Digestive system, respiratory system, circulatory system, lymphatic system, urinary system, reproductive system, endocrine glands, nervous system. Reticuloendothelial system.
 Body architecture: symmetry, axons and planes.

COURSE TITLE	FIRST AID
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Core Module (C)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	1 st

COURSE DESCRIPTION:

First steps of the assessment of a patient: a) injury and bleeding, b) foreign bodies, c) injury due to natural causes and abnormal signs that necessitate first aid, d) artificial breathing and cardiopulmonary resuscitation (CPR). Bandages, splints, stretchers, poisoning and antidotes, contents of a First Aid kit, emergency tracheotomy, familiarization with alarming signs

COURSE TITLE	HYGIENE-EPIDEMIOLOGY
COURSE TYPE	Theoretical
COURSE CATEGORY	Core Module (C)
WEEKLY TEACHING HOURS	4 Theory
ECTS	4
ACADEMIC SEMESTER	1 st

COURSE DESCRIPTION:

Health principles, Health, Disease

Aims: immunological agents, transmission agents, methods and ways of destruction of disease-causing agents, private, public and social hygiene, epidemic, endemic, pandemic, prevalence impact indicators, epidemiological data sources, epidemiological research, assessment of preventive measures, clinical epidemiology, pre-symptom control, and epidemiology of infectious diseases.

COURSE TITLE	ETHICS IN PHYSIOTHERAPY
COURSE TYPE	Theoretical
COURSE CATEGORY	Core Module (C)
WEEKLY TEACHING HOURS	2 Theory
ECTS	4
ACADEMIC SEMESTER	1 st

COURSE DESCRIPTION:

Introduction to Physiotherapy: the profession of a physiotherapist, the relationship with the other health professions, the association of physiotherapy's acts and methods, holistic patient's treatment.

The philosophy of ethics in health professions: problems and dilemmas in health department, patients' right to information, the right of privacy and the option to participate in clinical trials, euthanasia, denial of service offer.

Health professions, laws and society, application of physiotherapeutic acts, equality in health services, the disability, the compensation, the medical error etc. Ethics, religion and human rights.

COURSE TITLE	PSYCHOLOGY
COURSE TYPE	Theoretical
COURSE CATEGORY	Administration, Economics, Legislation and Humanities modules (AELH)
WEEKLY TEACHING HOURS	2 Theory
ECTS	5
ACADEMIC SEMESTER	1 st

COURSE DESCRIPTION:

Introduction to Psychology. Basic concepts. Understanding the basic behavior of the individual. Physiotherapist – patient. Physiotherapist – work environment. Physiotherapist – working group.

Psychology branches, heredity and environment, intelligence, personality and adjustment, mental health and dealing with psychological techniques, discrimination between normal and pathological attitude at different stages of a person’s life, psychology of the child, adolescent, third age psychology, the psychology of the patient and its family, stress control and situations of psychological crisis, people with special needs and their families , cognitive, behavioral, psychodynamic psychotherapy, examples of behavioral changes through various psychotherapeutic methods.

COURSE TITLE	KINESIOLOGY I
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Special Courses (S)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	1 st

COURSE DESCRIPTION:

Introduction to kinesiology. Principles of stability and motion. Terminology. Structure and materials of the joints. Types of the joints. Monoarticular and polyarticular muscles, open and closed kinetic chains. Mechanics of muscle function, types of muscle contraction.

The role of muscles in movement: Principles of force – movement. Antagonist, synergist and fixator muscles. The physiological and mechanical factors that affect muscle contraction, the neuromuscular basis of human motion. Muscle function and motion levers. Gait analysis, movement of shoulder and shoulder girdle, elbow joint (radius-ulna joint), wrist and fingers, spine.

2nd SEMESTER

	2 nd Semester	CC		Lec	Lab	Total	WL	ECTS
1.	Physiology	C	M	4	2	6	210	6
2.	Pathology	C	M	4		4	180	6
3.	Surgery	C	M	2		2	90	4
4.	Biophysics	C	M	2		2	90	4
5.	Massage Techniques	S	M	2	2	4	120	5
6.	Kinesiology II	SC	M	2	2	4	120	5
	Total			16	6	22	810	30

COURSE TITLE	PHYSIOLOGY
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Core Module (C)
WEEKLY TEACHING HOURS	6 (Theory 4, Laboratory 2)
ECTS	6
ACADEMIC SEMESTER	2 nd

COURSE DESCRIPTION:

Basic principles of the physiological functions of the human body. Cell: structure and function, tissues, organs, systems, homeostasis, transmembrane movements(water movement and solute).

Blood, respiratory and cardiovascular system. Kidneys – Urinary system. Digestive system. Metabolism, Thermoregulation. Nervous system, sleep and arousal. Muscular system. Sensory organs. Endocrine system – Hormones, Lymph – Lymph system. Basic-acidic balance.

COURSE TITLE	PATHOLOGY
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Core Module (C)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	6
ACADEMIC SEMESTER	2 nd

COURSE DESCRIPTION:

Elements of pathologoanatomy, international statistical classification of diseases, methodology for approaching the patient, infectious diseases. Adults' major infectious diseases, respiratory and circulatory system diseases, collagen, arthropathies, endocrine diseases, renal diseases, main diseases of the peptic system, blood diseases, skin diseases.

COURSE TITLE	SURGERY
COURSE TYPE	Theoretical
COURSE CATEGORY	Core Module (C)
WEEKLY TEACHING HOURS	2 Theory
ECTS	4
ACADEMIC SEMESTER	2 nd

COURSE DESCRIPTION:

Introduction to Surgery, basic concepts and principles. Surgery (operation): incision, closure of wounds and healing (cicatrization). Preoperative care, postoperative inflammation/ common postoperative complications. Burns.

Resurfacing surgery. Breast diseases, diseases of thyroid gland and aperture. Abdominal surgery, wounds and diseases of liver, biliary, pancreas and spleen, introspection. Thoracic surgery, cardiovascular surgery, urinal-genital surgery, neurosurgery, anesthesiology, AIDS in general surgery.

COURSE TITLE	BIOPHYSICS
COURSE TYPE	Theoretical
COURSE CATEGORY	Core Module (C)
WEEKLY TEACHING HOURS	2 Theory
ECTS	4
ACADEMIC SEMESTER	2 nd

COURSE DESCRIPTION:

General part – Introduction.

Principles of mechanics in solids, concept of power and torque and their application in bio-gth of biomaterials, mechanical and fluid elements. References to hemodynamic and natural blood circulation, mechanical oscillations, fluctuations, acoustic. Heat and temperature – sound – electricity and magnetism.

Biophysical properties:

- a) Electrical currents
- b) Ultrasound- applications in medicine and physiotherapy
- c) Diathermy-bioelectrical potentials: effects and applications on human body
- d) Hot – cold packs
- e) Laser-basic meanings and capacities: application in medicine and physiotherapy.

Biophysical capacities and applications of electric current, diathermy, ultrasound, laser, cold and warm packs.

COURSE TITLE	MASSAGE TECHNICIS I
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Special Courses (S)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	2 nd

COURSE DESCRIPTION:

Introduction to massage. Effect of massage and massage techniques. Techniques of classical massage, connective tissue massage, deep transverse friction, functional massage, reflex points massage, lymph massage. Applications of kneading. Physiotherapy assessment and preparation for massage. Massage and prevention. The effects of massage on tissues (skin, muscles, vessels and bowels). Massage as a therapeutic approach in combination with other techniques and methods. Biological effects of massage in painful syndromes, in sports, in cardio-respiratory diseases, in neurological diseases, etc. Indications and contraindications.

COURSE TITLE	KINESIOLOGY II
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialization Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	2 nd

COURSE DESCRIPTION:

Pelvic girdle and hips: Functional and kinesiological characteristics, sacro-iliac joint, hip joint, analysis of pelvic/hip movements. Lumbar-pelvic rhythm.
The knee joint: Functional and kinesiological characteristics, femoral-tibial and patella-femoral joint.
Foot: functional, kinesiological characteristics and motion analysis of the ankle, subtalar joint, mid-tarsal and rest joints. Foot arches.
Differences and similarities: shoulder and pelvic girdle, hip and shoulder. Motion analysis, analysis of lower extremity movements with open and closed chain exercises.

3rd SEMESTER

	3 rd Semester	CC		Lec	Lab	Total	WL	ECTS
1.	Orthopaedics	C	M	4		4	180	6
2.	Neurology	C	M	4		4	180	6
3.	Diagnostic Imaging	S	M	2		2	90	3
4.	Biomechanics – Ergonomics	S	M	2	2	4	120	5
5.	Physical Agents – Electrotherapy I	SC	M	2	2	4	120	5
6.	Kinesiotherapy	SC	M	2	2	4	120	5
	Total			16	6	22	810	30

COURSE TITLE	ORTHOPAEDICS
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Core Module (C)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	6
ACADEMIC SEMESTER	3 rd

COURSE DESCRIPTION:

Introduction in Orthopaedics, diagnosis - medical treatment. Arthritis, synovitis, bone tuberculosis. Degenerative osteoarthritis, congenital bone diseases, metabolic diseases, neoplasms in Orthopaedics. Fractures, muscle injuries, soft tissue damage. Clinical examination, diagnosis and treatment of diseases and deformities: shoulder girdle, elbow, wrist and hand, spine, hip, knee, ankle and foot.

COURSE TITLE	NEUROLOGY
COURSE TYPE	Theoretical
COURSE CATEGORY	Core Module (C)
WEEKLY TEACHING HOURS	4 Theory
ECTS	6
ACADEMIC SEMESTER	3 rd

COURSE DESCRIPTION:

Introduction. General part. Neurophysiology principles and nervous system anatomy. Evolution of the nervous system. Sensation and motion. General symptoms following cranial nerve damage. Traumatic brain injury. Vascular diseases of the brain. Peripheral nerve injuries, myopathies, myopathy gravis. Hemiplegia - paraplegia – quadriplegia. Cerebral palsy. Brain – spinal cord traumas. Tumors – neuritis – neuropathies. Mononeuritis. Multiple sclerosis and degenerative diseases of the nervous system. Laboratory tests in neurology. Treatment principles. Origin – insertion – motions concerning nervous system.

COURSE TITLE	DIAGNOSTIC IMAGING
COURSE TYPE	Theoretical
COURSE CATEGORY	Special Courses (S)
WEEKLY TEACHING HOURS	Theory 2
ECTS	3
ACADEMIC SEMESTER	3 RD

COURSE DESCRIPTION:

Introduction to diagnostic imaging, contemporary imaging techniques, X-ray types, degenerative spine diseases, physiological imaging of pelvis and hip, shoulder and upper extremity, arteriography and venography, physiological imaging of tibia and fibula, ankle and chest. Cardiovascular, digestive, genital and urinary system.

COURSE TITLE	BIOMECHANICS AND ERGONOMY
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialization Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	3 rd

COURSE DESCRIPTION:

The course includes the main principles of biomechanics and analyzes the fundamental Newton's laws of motion (work, power, action, forces and synthesis of forces). Types of movement, axes and planes of movement, orbit, biomechanical modules, types of levers, torque, line and draft angle. Biomechanical properties of the muscles, with emphasis on the interpretation of the muscle contraction, muscle insufficiency and muscle work. Kinematics and arthrokinematics, morphology and mechanical properties of joints and joint cartilage of the upper and lower extremities, kinetic and kinematic analysis. Gravity, center of gravity, balance and gait. Injury prevention in workspace, ergonomic design and organization of workspace (space – equipment – sitting posture).

COURSE TITLE	PHYSICAL AGENTS – ELECTROTHERAPY I
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialization Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	3 rd

COURSE DESCRIPTION:

Hydrotherapy - Thermotherapy: superficial and deep. Baths – pools – exercises in the water. Therapeutic electrical currents. Electromagnetic waves. Bio-feedback.

Electromyography. Ultrasound – shockwave therapy. Laser. Other modalities and application protocols.

COURSE TITLE	KINESIOTHERAPY
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialization Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	3 rd

COURSE DESCRIPTION:

General principles of assessment of the functional capacity of the musculoskeletal system (range of motion, goniometry, elasticity, muscle strength and proprioception. Active and passive motion. Types of muscle contractions. Isotonic, isometric and isokinetic exercise. Methodology of organizing and planning programs to improve muscle elasticity. Rehabilitation programs to improve muscular strength and range of motion, and to re-educate proprioception and kinesthesia. Effects of immobilization.

4th SEMESTER

	4 th Semester	CC		Lec	Lab	Total	WL	ECTS
1.	Neurophysiology	S	M	2		2	90	5
2.	Methods and Techniques of Neuromuscular Re-education	S	M	2	2	4	120	5
3.	Physiotherapy for the Respiratory System Mobilization and	SC	M	2	2	4	120	5
4.	Manipulation Techniques	S	M	2	2	4	120	5
5.	Exercise Physiology	S	M	2		2	90	5
6.	Physical Agents – Electrotherapy II	SC	M	2	2	4	120	5
	Total			12	8	20	660	30

COURSE TITLE	NEUROPHYSIOLOGY
COURSE TYPE	Theoretical
COURSE CATEGORY	Special Courses (S)
WEEKLY TEACHING HOURS	4 Theory
ECTS	5
ACADEMIC SEMESTER	4 th

COURSE DESCRIPTION:

Elements of molecular neurophysiology, nervous cell physiology.
 Sensation: Joint receptors, muscle spindle, Golgi tendon organs.
 Motion: electrotherapy, nerve stimulation.

Characteristics and functions of sensorimotor mechanisms. Their relationship with motor control and posture. Proprioceptive Neuromuscular Facilitation (PNF). Neuromuscular junction and muscle contraction/ twitching. Cold – thermal effect. Clinical examination. Therapeutic applications. Mechanism of pain – interception. Physiological motor control.

COURSE TITLE	METHODS AND TECHNIQUES OF NEUROMUSCULAR RE-EDUCATION
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Special Courses (S)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	4 th

COURSE DESCRIPTION:

Theoretical basis of motor control: classic models of motor control. Principles of the main methods and techniques of neuromuscular re-education. Proprioceptive Neuromuscular Facilitation (PNF). Hemiplegia. Various methods (Bobath, Kabatt, e.t.c.). Selection physiotherapeutic criteria for the most appropriate method .

COURSE TITLE	PHYSIOTHERAPY FOR THE RESPIRATORY SYSTEM
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialization Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	4 th

COURSE DESCRIPTION:

Kinesiological analysis of breathing, physiotherapeutic assessment of the patient with respiratory disorders, respiratory physiotherapy (asthma in adults and children, chronic obstructive pulmonary diseases (COPD), respiratory disorders, etc., Intensive Care Unit), mechanical support, mechanical ventilation. Prevention of respiratory diseases. Respiratory physiotherapy in patients with accompanying conditions (musculoskeletal, neurological, geriatric, big surgery etc.)

COURSE TITLE	MOBILIZATION AND MANIPULATION TECHNIQUES
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Special Courses (S)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	4 th

COURSE DESCRIPTION:

Introduction, basic concepts, joint mobilization, joint play.
Bone positions: anatomical, relaxed, locked position.
Control of joint motion: passive and active motion. Resistance movements relative to joint mobilization. Pain differentiation and mobilization techniques for pain relief. Quantitative and qualitative assessment of motion. Normal and pathological end-feel. Limited range of motion and treatment techniques. Passive mobilization techniques through special stretching and positions. Application in upper and lower extremities. Spinal problems and mobilization techniques.

COURSE TITLE	EXERCISE PHYSIOLOGY
COURSE TYPE	Theoretical
COURSE CATEGORY	Special Courses (S)
WEEKLY TEACHING HOURS	2 Theory
ECTS	5
ACADEMIC SEMESTER	4 th

COURSE DESCRIPTION:

Energy and muscle activity, sources of energy, anaerobic and aerobic energy sources, metabolism. Muscle exercise: The effects of exercise on the neuromuscular, cardiovascular and respiratory system. The effect of exercise on healthy population and people with special conditions. Exercise physiology, diet.

COURSE TITLE	PHYSICAL AGENTS-ELECTROTHERAPY II
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialization Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	4 th

COURSE DESCRIPTION:

Introduction to clinical electrical stimulation: biophysics of electrical stimulation, biological effects, biochemical effects.

Electrical muscular stimulation (EMS): parameters, electric stimulation of enervated and denervated muscles, electrodiagnosis, electrical high-voltage stimulation.

Electroanalgesia: DF, MF, CP currents, Russian type Kotz, Leduc current etc.

Transcutaneous electrical nerve stimulation (TENS), interferential currents, iontophoresis (galvanic).

5th SEMESTER

	5 th Semester	CC		Lec	Lab	Total	WL	ECTS
1.	Foreign Language - Terminology	S	M	2		2	90	4
2.	Physiotherapy for the Musculoskeletal System I	SC	M	2	2	4	120	5
3.	Physiotherapy for Neurological Disorders I	SC	M	2	2	4	120	5
4.	Special Physical Education	SC	M	2	2	4	120	5
5.	Clinical Placement I (Cardio-Respiratory)	C	E	2	8	10	210	6
6.	Physiotherapy for the Circulatory System	SC	E	2	2	4	120	5
	Total			12	16	28	780	30

COURSE TITLE	FOREIGN LANGUAGE - TERMINOLOGY
COURSE TYPE	Theoretical
COURSE CATEGORY	Special Courses (S)
WEEKLY TEACHING HOURS	2 Theory
ECTS	4
ACADEMIC SEMESTER	5 th

COURSE DESCRIPTION:

Comprehension of English medical texts. Language structure (grammar, vocabulary, etc.), medical terminology used by physiotherapists. Developing of speaking, reading and writing capacity for an effective communication.

COURSE TITLE	PHYSIOTHERAPY FOR THE MUSCULOSKELETAL SYSTEM I
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialization Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, -Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	5 th

COURSE DESCRIPTION:

Physiotherapeutic assessment and treatment of musculoskeletal disorders. Fractures, sprains, dislocations. Muscle injuries, tendons, soft tissue disorders. Peripheral nerve injuries - neurapraxia, axonotmesis, neurotmesis.

COURSE TITLE	PHYSIOTHERAPY FOR NEUROLOGICAL DISORDERS I
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialization Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	5 th

COURSE DESCRIPTION:

Anatomical and physiological background of the nervous system, motor development. Reflex function. Guide points for the assessment of motor maturation. Clinical value of normal motor development. Motion and tone disorders. Cerebral palsy. Peripheral nerve disorders. Myopathies. Spina bifida. Hydrocephalus. Polyneuropathies.

COURSE TITLE	SPECIAL PHYSICAL EDUCATION
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialization Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	5 th

COURSE DESCRIPTION:

Ranking, classification, physical education criteria for patients with motion or sensory disorders, mental retardation. Group exercise programs and recreational activities, therapeutic programs in relation with professional and sports activities. Assessment of driving ability, hydrotherapy, sports events, special physical education programs.

COURSE TITLE	CLINICAL PLACEMENT I (CARDIO-RESPIRATORY)
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Core Module (C)
WEEKLY TEACHING HOURS	10 (Theory 2, Laboratory 8)
ECTS	6
ACADEMIC SEMESTER	5 th

COURSE DESCRIPTION:

Physiotherapeutic assessment of a patient with respiratory problems and treatment

methods. Spirometry. Ways of drainage and breathing education. Intensive Care Unit. Criteria for selecting the type of mechanical ventilation. The role of prevention, inclusion in rehabilitation programs, observation, recording symptoms, reintegration. Assessment and improvement of respiratory function in patients with musculoskeletal, neurological and other disorders.

COURSE TITLE	PHYSIOTHERAPY FOR THE CIRCULATORY SYSTEM
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialized Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	5 th

COURSE DESCRIPTION:

Cardiovascular diseases: Degree and severity of the condition - epidemiological data.
 Exercise and cardiovascular function: Long-term effects and benefits of systematic exercise.
 Physiotherapeutic assessment of cardiovascular function: Tests for the assessment of the functional capacity of the cardiovascular system, data of the electrocardiography.
 Planning prevention and rehabilitation programs for cardiovascular diseases.
 Physiotherapy in Intensive Care Unit. Physiotherapeutic assessment for the treatment of peripheral vascular diseases. Cardiopulmonary resuscitation (CPR).
 Assessment and treatment of cardiovascular patients with accompanying musculoskeletal, neurological, respiratory and other problems.

6th SEMESTER

	6 th Semester	CC		Lec	Lab	Total	WL	ECTS
1.	Physical Medicine and Rehabilitation	S	M	2		2	90	5
2.	Physiotherapy for the Musculoskeletal System II	SC	M	2	2	4	120	5
3.	Physiotherapy for Neurological Disorders II	SC	M	2	2	4	120	5
4.	Biostatistics	S	M	2		2	90	5
5.	Clinical Placement II (Musculoskeletal Injuries and Disorders)	SC	M	2	12	14	270	10
	Total			10	16	26	690	30

COURSE TITLE	PHYSICAL MEDICINE AND REHABILITATION
COURSE TYPE	Theoretical
COURSE CATEGORY	Special Courses (SC)
WEEKLY TEACHING HOURS	2 Theory
ECTS	5
ACADEMIC SEMESTER	6 th

COURSE DESCRIPTION:

Introduction in disability: Games for patients with disabilities, rehabilitation, international classification. Composition and methods of a team. Psychosocial and professional reintegration. Medical rehabilitation: rheumatic patient, cancer patient,

geriatrics, diseases and lesions of spinal cord and peripheral nerves. Degenerative diseases of central and peripheral nervous system (multiple sclerosis, Parkinson's disease, etc.). Orthosis, walking aids, moving and self-service issues. Amputations - Protheses.

COURSE TITLE	PHYSIOTHERAPY FOR THE MUSCULOSKELETAL SYSTEM II
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialized Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	6 th

COURSE DESCRIPTION:

Physical assessment and rehabilitation of musculoskeletal disorders and related problems. Diseases and deformities of spine and extremities. Arthritis, degenerative osteoarthritis, inflammatory arthropathies, neurogenic arthropathies, infectious arthropathies, fibrosis.

Assessment and treatment of the myofascial pain. Deactivation of trigger points. Fatigue syndrome and musculoskeletal disorders.

COURSE TITLE	PHYSIOTHERAPY FOR NEUROLOGICAL DISORDERS II
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialized Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	56 TH

COURSE DESCRIPTION:

Clinical physiotherapeutic assessment in diseases of the adult nervous system. Basic

principles of the therapeutic intervention in brain injuries, tumors, traumatic brain injury, spinal cord traumas, stroke, Parkinson's disease, multiple sclerosis, gravis, etc. Gait re-education, balance, self-service and functional rehabilitation of the neurological patient.

COURSE TITLE	BIostatISTICS
COURSE TYPE	Theoretical
COURSE CATEGORY	Special Courses (S)
WEEKLY TEACHING HOURS	2 Theory
ECTS	5
ACADEMIC SEMESTER	6 th

COURSE DESCRIPTION:

Introduction, basic principles. Definitions – basic concepts. Types of data. Designing medical research studies. Applications of the biostatistics in public health. Methodology of collection, presentation and analysis of the statistical material. General principles of descriptive statistics. Distributions, parametric and non-parametric tests, variance.

COURSE TITLE	CLINICAL PLACEMENT II (MUSCULOSKELETAL INJURIES AND DISORDERS)
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialized Courses (SC)
WEEKLY TEACHING HOURS	14 (Theory 2, Laboratory 12)
ECTS	10
ACADEMIC SEMESTER	6 th

COURSE DESCRIPTION:

Physiotherapeutic assessment and rehabilitation of patients after surgical treatment of musculoskeletal disorders and injuries. Physiotherapeutic rehabilitation after fractures in the upper and lower extremities, spine deformities, ligamentous injuries, peripheral nerve injuries. Pre-and post-surgical physiotherapeutic assessment - rehabilitation after arthroplasty, clinical applications.

7th SEMESTER

	7 th Semester	CC		Lec	Lab	Total	WL	ECTS
1.	Physiotherapy Assessment	SC	M	2	2	4	120	5
2.	Research Methods in Physiotherapy	S	M	2	2	4	120	5
3.	Physiotherapy in Sports	SC	M	2	2	4	120	5
4.	Clinical Placement III (Neurological Disorders)	SC	M	2	12	14	270	10
5.	Physiotherapy and Age	SC	M	2	2	4	120	5
	Total			10	20	30	750	30

COURSE TITLE	PHYSIOTHERAPY ASSESSMENT
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialized Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	7 th

COURSE DESCRIPTION:

Introduction in physiotherapeutic assessment, collecting and recording measures.

Methods and means of subjective and objective physiotherapeutic assessment. Considering all the parameters - planning the rehabilitation program.

COURSE TITLE	RESEARCH METHODS IN PHYSIOTHERAPY
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Special Courses (S)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	7 th

COURSE DESCRIPTION:

Introduction in research methodology in physiotherapy (what a research is, research types, challenges of the physiotherapeutic study, etc.). Bibliography, articles. Ethics and morality in physiotherapeutic research. Quantification, experimental and non-experimental studies. Definition of research hypothesis, designing the research protocol, data collection, data analysis and outcome of conclusions. Announcement and publication of the study.

COURSE TITLE	PHYSIOTHERAPY IN SPORTS
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialized Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	7 th

COURSE DESCRIPTION:

Introduction to sports injuries and exercises (warming up, recovery, prevention) in different sports (gymnastics, team sports, water sports, wrestling, etc.). Assessment of the muscle strength, endurance, flexibility, stretching. Assessment tests for traumatic injuries and overuse syndromes, rehabilitation programs for different

types of injuries, safe reintegration and return to sports activities. First aids in sports arena, bandaging and immobilization in splints.

COURSE TITLE	CLINICAL PLACEMENT III (NEUROLOGICAL DISORDERS)
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialized Courses (SC)
WEEKLY TEACHING HOURS	14 (Theory 2, Laboratory 12)
ECTS	10
ACADEMIC SEMESTER	7 th

COURSE DESCRIPTION:

Clinical physiotherapeutic assessment and rehabilitation of patients with neurological disorders. Head injuries and tumors. Parkinson’s disease, multiple sclerosis, hemiplegia, paraplegia, quadriplegia. Objectives and perspectives. Age adaptation of the physiotherapeutic intervention. Gait re-education and balance. Self-service of the patient. Reintegration into the society. Sports physiotherapy.

COURSE TITLE	Physiotherapy and Age
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Specialized Courses (SC)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ECTS	5
ACADEMIC SEMESTER	7 th

COURSE DESCRIPTION:

Introduction in the variability of the physiotherapeutic intervention program according to the patient age:

Childhood: Burns, accidents, wheelchairs.

Teens: Bad posture, osteochondritis, smoking, body weight.

Middle age: overuse syndromes, office disease, weekend disease, painless childbirth.

Elderly: specific problems, falls and fractures, impaired gait and balance, osteoporosis, vascular problems. Behavioral problems by disabled people, and differences between elderly and young patients. Group exercise in organized hydrotherapy settings, spas. Amputation, prostheses and orthoses in rehabilitation applications.

8th SEMESTER

	8 th Semester						WL	ECTS
1.	Dissertation						500	20
2.	Practical Clinical Placement						250	10
	Total						750	30

Graduate Seminar

The students attending the last semester of studies have to prepare and present a topic assigned to them (dissertation). The presentation follows a discussion and a Q&A session with the participation of all students.

Apart from the aforementioned courses, the curriculum also includes at least two hours of optional courses which are selected by the administration in accordance to the Studies Regulation.