Technological Educational Institute of Athens (TEI- A)

Faculty of Health and Caring Professions

Physiotherapy Department

CURRICULUM
COURSE DESCRIPTION

Implementation Period: 1983 – September 2000

Editing: Professor Eirini Grammatopoulou

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

1st SEMESTER

	1st Semester	C	Lect	Lab	Total
1.	Anatomy I	M	3	1	4
2.	Physiology I	M	3	1	4
3.	Kinesiology I	M	3	2	5
4.	Biophysics	M	3		3
5.	Biochemistry	M	3		3
6.	Biometry – Biostatistics	M	3		3
7.	Psychology	M	2		2
8.	Sociology	M	2		2
9.	Elements of Public Health	M	2		2
10.	Physical Education I	M	-	4	4
	Total Semester Hours		24	8	32

Abbreviations
C = Course Category, **M** =Mandatory
Lect = Lecture hours per week
Lab = Laboratory hours per week

COURSE TITLE	ANATOMY I
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	4 (Theory 3, Laboratory 1)
ACADEMIC SEMESTER	1st

COURSE DESCRIPTION:
Cells, organs, tissues, systems and parts of the human body. Osteology – ligaments, muscular system. Types, properties, actions of muscles. Muscles of face, head, neck, chest, back, abdomen, upper and lower extremities. Origin – insertion – motions. Nervous system. Cerebrospinal - Central (brain- spinal cord). Peripheral (Nerves and ganglia). Autonomic nervous system. Sense organs.

COURSE TITLE	PHYSIOLOGY I
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	4 (Theory 3, Laboratory 1)
ACADEMIC SEMESTER	1st

COURSE DESCRIPTION:
Basic principles of the physiological functions of the human body. Cell physiology. Nervous system. Muscular system. Sense organs. Endocrine system – Hormones.

COURSE TITLE	KINESIOLOGY I
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	5 (Theory 3, Laboratory 2)
ACADEMIC SEMESTER	1st

COURSE DESCRIPTION:
Introduction. Principles of stability and motion. Structures and materials of the joints. Principles of force – movement. Levers. Gait. Muscle function. Neuromuscular basis of human motion.

COURSE TITLE	BIOPHYSICS
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	3 Theory
ACADEMIC SEMESTER	1st

COURSE DESCRIPTION:
General part – Introduction. Elements of mechanics – heat – sound – electricity.

Biophysical properties: a) Electrical currents, b) Ultrasounds, c) Diathermy, d) Hot – cold, e) Laser etc.

COURSE TITLE	BIOCHEMISTRY
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	3 Theory
ACADEMIC SEMESTER	1st

COURSE DESCRIPTION:

Function and composition of biochemical substances. Structure and metabolism of protides. Enzymology. Cellular oxidation. Structure and metabolism of glucides. Structure and metabolism of lipids. Steroids. Nucleic acids. Protein biosynthesis. Porphyrins. Hemoglobins. Proteins. Vitamins.

COURSE TITLE	BIOMETRY - BIOSTATISTICS
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	3 Theory
ACADEMIC SEMESTER	1st

COURSE DESCRIPTION:

Definitions – basic concepts. Applications of the biostatistics principles in population health. Methodology of collection, presentation and analysis of data. General principles of descriptive statistics.

COURSE TITLE	PSYCHOLOGY
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	2 Theory
ACADEMIC SEMESTER	1st

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

COURSE TITLE	SOCIOLOGY
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	2 Theory
ACADEMIC SEMESTER	1st

COURSE DESCRIPTION:
Introduction to the basic concepts of Sociology and the methodology of analysis. Political and social bases of human behaviour. The role of values in social life. Systems of social conditions. Human ecology and population. Intersocial relationships and changes. Social institutions. Social research.

COURSE TITLE	ELEMENTS OF PUBLIC HEALTH
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	2 Theory
ACADEMIC SEMESTER	1st

COURSE DESCRIPTION:
Considerations in health – disease. Population disease agents. Population hygiene.

COURSE TITLE	PHYSICAL EDUCATION I
COURSE TYPE	Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	4 Laboratory
ACADEMIC SEMESTER	1st

COURSE DESCRIPTION:
Students' exercise. Group programs. Sports.

2nd SEMESTER

	2nd Semester	C	Lect	Lab	Total
1.	Anatomy II	M	3	1	4
2.	Physiology II	M	3	1	4
3.	Kinesiology II	M	2	2	4
4.	Orthopaedics	M	4		4
5.	Surgery	M	3		3
6.	Nosology I	M	2		2
7.	Rheumatology	M	2		2
8.	Massage Techniques I	M	1	2	3
9.	Physical Education II	M		4	4
10.	Foreign Language I	M	2	1	3
	Total Semester Hours		22	11	33

COURSE TITLE	ANATOMY II
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	4 (Theory 3, Laboratory 1)
ACADEMIC SEMESTER	2nd

COURSE DESCRIPTION:

Respiratory system. Circulatory system. Digestive system. Urinary system. Reproductive system. Endocrine glands. Reticuloendothelial system.

COURSE TITLE	PHYSIOLOGY II
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	4 (Theory 3, Laboratory 1)
ACADEMIC SEMESTER	2nd

COURSE DESCRIPTION:
Blood. Respiration. Circulatory system. Heart. Lymph – Lymphatic system. Acid-base balance. Kidneys – Urinary system. Digestive system. Metabolism. Thermoregulation.

COURSE TITLE	**KINESIOLOGY II**
COURSE TYPE	**Theoretical & Laboratory**
COURSE CATEGORY	**Mandatory (M)**
WEEKLY TEACHING HOURS	**4 (Theory 2, Laboratory 2)**
ACADEMIC SEMESTER	**2nd**

COURSE DESCRIPTION:
Spine. Chest - shoulder girdle. Upper limbs. Muscular control. Motion analysis.

COURSE TITLE	**ORTHOPAEDICS**
COURSE TYPE	**Theoretical**
COURSE CATEGORY	**Mandatory (M)**
WEEKLY TEACHING HOURS	**4 Theory**
ACADEMIC SEMESTER	**2nd**

COURSE DESCRIPTION:
General part. Fractures. Sprains – dislocations. Soft tissue injuries. Amputations – prostheses – splints. Deformation of spine and limbs. Orthopedic surgery – traumatology.

COURSE TITLE	SURGERY
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	3 Theory
ACADEMIC SEMESTER	2nd

COURSE DESCRIPTION:
General part. Elements of general surgery. Thoracic surgery – Heart surgery. Neurosurgery. Abdominal surgery. Common postoperative complications. Burns.

COURSE TITLE	NOSOLOGY I
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	2 Theory
ACADEMIC SEMESTER	2nd

COURSE DESCRIPTION:
General part. General causes of diseases, microbes, physical and chemical agents, deprivation diseases, heredity, diseases of unknown cause.
Elements of pathologoanatomy.
Inflammation, degeneration, atrophy, hypertrophy, hyperplasia, necrosis, ischemia, infarction, thrombosis, embolism, neoplasia.
Respiratory system diseases. Digestive system diseases. Kidney diseases. First aid, bandaging.

COURSE TITLE	RHEUMATOLOGY
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	2 Theory
ACADEMIC SEMESTER	2nd

COURSE DESCRIPTION:
Inflammatory arthropathies. Degenerative arthropathies. Neurogenic arthropathies. Infectious arthropathies. Fibrositis.

COURSE TITLE	MASSAGE TECHNIQUES I
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	3 (Theory 1, Laboratory 2)
ACADEMIC SEMESTER	2nd

COURSE DESCRIPTION:
General part. Effects of massage. Types. Practical applications.

COURSE TITLE	PHYSICAL EDUCATION I
COURSE TYPE	Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	4 Laboratory
ACADEMIC SEMESTER	2nd

COURSE DESCRIPTION:
Students' exercise. Group programs. Sports.

COURSE TITLE	FOREIGN LANGUAGE I
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	3 (Theory 2, Laboratory 1)
ACADEMIC SEMESTER	2nd

COURSE DESCRIPTION:
Grammar, use of words. Effective verbal communication. Developing reading and writing capacity.

3rd SEMESTER

	3rd Semester	C	Lect	Lab	Total
1.	Kinesiology III	M	2	2	4
2.	Neurology	M	4		4
3.	Pathophysiology	M	2		2
4.	Nosology II	M	2		2
5.	Physiotherapy IC	M	2	4	6
6.	Physiotherapy IIC	M	2	4	6
7.	Physiotherapy IIIC	M	2	3	5
8.	Massage Techniques II	M		2	2
9.	Physical Medicine and Rehabilitation I	M	3		3
10.	Foreign Language II	M	2	1	3
	Total Semester Hours		21	16	37

COURSE TITLE	KINESIOLOGY III
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ACADEMIC SEMESTER	3rd

COURSE DESCRIPTION:

Lower limbs. Kinesiological applications. Injury prevention. Motion analysis. Muscular control.

COURSE TITLE	NEUROLOGY
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	4 Theory
ACADEMIC SEMESTER	3rd

COURSE DESCRIPTION:

Introduction. General part. Evolution of the nervous system. Treatment principles. Hemiplegia - paraplegia – quadriplegia. Cerebral palsy. Brain – spinal cord traumas.

Peripheral nerve injuries. Tumors – neuritis – neuropathies. Special nervous problems.

COURSE TITLE	PATHOPHYSIOLOGY
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	2 Theory
ACADEMIC SEMESTER	3rd

COURSE DESCRIPTION:
Pathophysiology of respiration. Pathophysiology of circulation.

COURSE TITLE	NOSOLOGY II
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	2 Theory
ACADEMIC SEMESTER	3rd

COURSE DESCRIPTION:
Circulatory system diseases. Urinary system diseases. Diabetes mellitus. Neoplasms. Gerontology. Elements of ENT – dermatology – obstetrics – gynecology.

COURSE TITLE	PHYSIOTHERAPY IC
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	6 (Theory 2, Laboratory 4)
ACADEMIC SEMESTER	3rd

COURSE DESCRIPTION:

Introduction to kinesiotherapy. Passive – active motion. Pendulum - Suspension motion. Resistance – assisted motion. Relaxation. Stretching. Joint mobility and measurement. Fracture healing.

COURSE TITLE	**PHYSIOTHERAPY IIC**
COURSE TYPE	**Theoretical & Laboratory**
COURSE CATEGORY	**Mandatory (M)**
WEEKLY TEACHING HOURS	**6 (Theory 2, Laboratory 4)**
ACADEMIC SEMESTER	**3rd**

COURSE DESCRIPTION:

Respiratory problems. Amputations – Prostheses. Natural vaginal delivery. Paediatrics.

COURSE TITLE	**PHYSIOTHERAPY IIIC**
COURSE TYPE	**Theoretical & Laboratory**
COURSE CATEGORY	**Mandatory (M)**
WEEKLY TEACHING HOURS	**5 (Theory 2, Laboratory 3)**
ACADEMIC SEMESTER	**3rd**

COURSE DESCRIPTION:

Arthritis. Rheumatic Diseases. Geriatrics. Entertainment rehabilitation. Group exercise – games. Burns.

COURSE TITLE	MASSAGE TECHNIQUES II
COURSE TYPE	Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	2 Laboratory
ACADEMIC SEMESTER	3rd

COURSE DESCRIPTION:
Connective tissue massage. Reflexive massage – Zones. New techniques. Manipulation.

COURSE TITLE	PHYSICAL MEDICINE AND REHABILITATION I
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	2 Theory
ACADEMIC SEMESTER	3rd

COURSE DESCRIPTION:
Fractures – deformations of spine and limbs. Peripheral nerves. Respiratory problems. Amputations. Prostheses.

COURSE TITLE	FOREIGN LANGUAGE II
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	3 (Theory 2, Laboratory 1)
ACADEMIC SEMESTER	3rd

COURSE DESCRIPTION:
Grammar, use of words. Effective verbal communication. Developing reading and writing capacity.

4th SEMESTER

	4th Semester	C	Lect	Lab	Total
1.	Exercise Physiology	M	2		2
2.	Specific Neurophysiology	M	2		2
3.	Hydro-Electrotherapy	M	2	6	8
4.	Physiotherapy ID	M	2	2	4
5.	Physiotherapy IID Rehabilitation of Neurological	M	2	2	4
6.	Diseases I	M	2	6	8
7.	Pediatrics	M	2		2
8.	Physical Medicine and Rehabilitation II	M	3		3
9.	Foreign Language III	M	2	1	3
10.	Elements of Radiology	M	2		2
	Total Semester Hours		21	17	38

COURSE TITLE	EXERCISE PHYSIOLOGY
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	2 Theory
ACADEMIC SEMESTER	4TH

COURSE DESCRIPTION:

The effects of exercise on the neuromuscular, cardiovascular and respiratory system. The effects of exercise on healthy people and people with particular problems.

COURSE TITLE	SPECIFIC NEUROPHYSIOLOGY
COURSE TYPE COURSE CATEGORY WEEKLY TEACHING HOURS ACADEMIC SEMESTER	Theoretical Mandatory (M) 2 Theory 4th

COURSE DESCRIPTION:

Characteristics and functions of sensorimotor mechanisms. Their relation to the control of posture and motion. Proprioceptive Neuromuscular Facilitation.

Psychro – thermal effect. Therapeutic applications. Mechanism of pain – interception.

COURSE TITLE	HYDRO-ELECTROTHERAPY
COURSE TYPE COURSE CATEGORY WEEKLY TEACHING HOURS ACADEMIC SEMESTER	Theoretical & Laboratory Mandatory (M) 8 (Theory 2, Laboratory 6) 4th

COURSE DESCRIPTION:

Thermotherapy – psychrotherapy. Baths – pools – exercises in water. Currents. Electromagnetic waves. Ultrasounds – vibrators. Laser. Other modalities and applications.

COURSE TITLE	PHYSIOTHERAPY ID
COURSE TYPE COURSE CATEGORY WEEKLY TEACHING HOURS ACADEMIC SEMESTER	Theoretical & Laboratory Mandatory (M) 4 (Theory 2, Laboratory 2) 4th

COURSE DESCRIPTION:
Deformation of spine. Deformation of limbs. Peripheral nerves. Neuritis – neuropathies.

COURSE TITLE	PHYSIOTHERAPY IID
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ACADEMIC SEMESTER	4th

COURSE DESCRIPTION:
Heart problems. Heart surgery. Circulatory problems. Intensive Care Unit. Common postoperative complications.

COURSE TITLE	REHABILITATION OF NEUROLOGICAL DISEASES I
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	8 (Theory 2, Laboratory 6)
ACADEMIC SEMESTER	4th

COURSE DESCRIPTION:
Proprioceptive Neuromuscular Facilitation (PNF). Hemiplegia. Various methods (Bobath, Kabatt, etc.)

COURSE TITLE	PEDIATRICS
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	2 Theory
ACADEMIC SEMESTER	4th

COURSE DESCRIPTION:
Growth – physique – environment – mental outlook. Genetics. Chronic diseases. Respiratory problems. Rheumatoid arthritis. Elements of cerebral palsy.

COURSE TITLE	PHYSICAL MEDICINE AND REHABILITATION II
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	3 Theory
ACADEMIC SEMESTER	4th

COURSE DESCRIPTION:
Heart - Circulatory problems. Intensive Care Unit. Postoperative complications. Arthritis. Rheumatic Diseases. Geriatrics. Burns.

COURSE TITLE	FOREIGN LANGUAGE III
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	3 (Theory 2, Laboratory 1)
ACADEMIC SEMESTER	4th

COURSE DESCRIPTION:
Grammar, use of words. Effective verbal communication. Developing reading and writing capacity.

COURSE TITLE	ELEMENTS OF RADIOLOGY
COURSE TYPE	**Theoretical**
COURSE CATEGORY	**Mandatory (M)**
WEEKLY TEACHING HOURS	**2 Theory**
ACADEMIC SEMESTER	**4th**

COURSE DESCRIPTION:
Introduction to Diagnostic Imaging, newer methods of imaging, characterization of X-rays, degenerative spine lesions, physiological radio-anatomy of pelvis and hips, shoulders and upper limbs, arteriography and venography, physiological radio anatomy of tibia and fibula, ankle and thorax. Cardiovascular system, digestive, genital and urinary system.

5th SEMESTER

	5th Semester	C	Lect	Lab	Total
1.	Rehabilitation of Neurological Diseases II	M	2	4	6
2.	Physical Medicine and Rehabilitation III	M	2		2
3.	Clinical Placement I	M	4	24	28
4.	Foreign Language - Terminology	M	2	1	3
	Total Semester Hours		10	29	39

COURSE TITLE	Rehabilitation of Neurological Diseases II
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	6 (Theory 2, Laboratory 4)
ACADEMIC SEMESTER	5th

COURSE DESCRIPTION:

Paraplegia – quadriplegia. Self-service. Races for people with disabilities. Cerebral palsy. Multiple Sclerosis. Parkinsonism etc.

COURSE TITLE	PHYSICAL MEDICINE AND REHABILITATION II
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	2 Theory
ACADEMIC SEMESTER	4th

COURSE DESCRIPTION:
Heart - Circulatory problems. Intensive Care Unit. Postoperative complications. Arthritis. Rheumatic Diseases. Geriatrics. Burns.

COURSE TITLE	CLINICAL PLCEMENT
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	28 (Theory 4, Laboratory 24)
ACADEMIC SEMESTER	5th

COURSE DESCRIPTION:
Practical placement in hospitals.

COURSE TITLE	FOREIGN LANGUAGE - TERMINOLOGY
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	3 (Theory 2, Laboratory 1)
ACADEMIC SEMESTER	5th

COURSE DESCRIPTION:
Learning the foreign language with the terminology that is used by the physiotherapists in daily practice.

6th SEMESTER

	6th Semester	C	Lect	Lab	Total
1.	Applied Physiotherapy	M	2	2	4
2.	Sports Medicine	M	2	2	4
3.	Clinical Placement II	M	4	22	26
4.	Graduates' Seminar	M	3		3
	Total Semester Hours		11	26	37

COURSE TITLE	APPLIED PHYSIOTHERAPY
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ACADEMIC SEMESTER	6th

COURSE DESCRIPTION:
Holistic management of clinical cases.

COURSE TITLE	SPORTS MEDICINE
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	4 (Theory 2, Laboratory 2)
ACADEMIC SEMESTER	6th

COURSE DESCRIPTION:
Preparation of athletes. Performance maximization. Prevention of sport injuries. Doping control. Rehabilitation of sport injuries.

COURSE TITLE	CLINICAL PLCEMENT
COURSE TYPE	Theoretical & Laboratory
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	26 (Theory 4, Laboratory 22)
ACADEMIC SEMESTER	6th

COURSE DESCRIPTION:
Practical placement in hospitals.

COURSE TITLE	GRADUATES' SEMINAR
COURSE TYPE	Theoretical
COURSE CATEGORY	Mandatory (M)
WEEKLY TEACHING HOURS	3 Theory
ACADEMIC SEMESTER	6th

COURSE DESCRIPTION:
The students that are in the last semester of studies have to work on and make an oral presentation of selected topics assigned to them. Following the presentation, a discussion and a Q&A session takes place with the participation of all students.
The timetable and the syllabus concern the core and core elective courses.
Apart from the above-mentioned courses, at least two hours of optional courses, determined by decision of the department and in accordance to the procedures that are defined by the Studies Regulation, are also included in the curriculum.

7th SEMESTER

	7th Semester	C	Lect	Lab	Total
1.	Dissertation	M			
2.	Practical Clinical Placement	M			