

ISTINYE UNIVERSITY
HEALTH SCIENCES INSTITUTE
PHYSIOTHERAPY AND REHABILITATION MASTER PROGRAM
COURSE DESCRIPTION

1th SEMESTER

FZY 5107 Master Thesis Advisory I | ECTS (0+1) 1

Determination of the thesis subject, domestic and foreign literature review related to the thesis topic, planning of all dimensions of the research, development of data collection tool, validity and reliability studies of data collection tool, data collection tool and evaluation of the findings, reporting of research results.

FZY 5105 MSc Specialization Course I | ECTS (4+0) 5

Literature review and research planning for specialization.

FZY 5101 Research Methods And Ethics | ECTS (2+0) 2

Ethics, ethics, biomedical ethical principles and their role in the health system, patient rights and the importance of this in physiotherapy practice, giving information about the professional behavior of physiotherapists.

FZY 5103 Practise in Physiotherapy and Rehabilitation I | ECTS (0+4) 4

The knowledge and skills gained in the field of physiotherapy and rehabilitation in the clinical environment, gain experience, to develop and customize a correct and ethical approach.

2nd SEMESTER

FZY 5108 Master Thesis Advisory II | ECTS (0+1) 1

Determination of the thesis subject, domestic and foreign literature review related to the thesis topic, planning of all dimensions of the research, development of data collection tool, validity and reliability studies of data collection tool, data collection tool and evaluation of the findings, reporting of research results

FZY 5106 MSc Specialization Course II | ECTS (4+0) 5

Literature review and research planning for specialization.

FZY 5171 Seminar | ECTS (1+0) 5

Discussion of different methods and treatments applied in the field of physiotherapy and rehabilitation and application innovations.

FZY 5104 Practise in Physiotherapy and Rehabilitation II | ECTS (0+4) 4

The knowledge and skills gained in the field of physiotherapy and rehabilitation in the clinical environment, gain experience, to develop and customize a correct and ethical approach.

3th SEMESTER

FZY 5207 Master Thesis Advisory III | ECTS (0+1) 1

Determination of the thesis subject, domestic and foreign literature review related to the thesis topic, planning of all dimensions of the research, development of data collection tool, validity and reliability studies of data collection tool, data collection tool and evaluation of the findings, reporting of research results.

FZY 5205 MSc Specialization Course III | ECTS (4+0) 5

Planning the master's thesis using the clinical decision making process, carrying out the master's thesis, and writing the master's thesis.

FZY 5191 Thesis Project I | ECTS (0+0) 24

Preparation of thesis Project.

4th SEMESTER

FZY 5208 Master Thesis Advisory IV | ECTS (0+1) 1

Determination of the thesis subject, domestic and foreign literature review related to the thesis topic, planning of all dimensions of the research, development of data collection tool, validity and reliability studies of data collection tool, data collection tool and evaluation of the findings, reporting of research results.

FZY 5206 MSc Specialization Course IV | ECTS (4+0) 5

Planning the master's thesis using the clinical decision making process, carrying out the master's thesis, and writing the master's thesis.

FZY 5192 Thesis Project II | ECTS (0+0) 24

Preparation of thesis Project.

AREA ELECTIVE COURSES

MANUAL THERAPY APPROACHES IN PHYSIOTHERAPY | ECTS (3+0) 5

Theoretical knowledge and application of manual therapy techniques.

ETHICS AND PROFESSIONALISM IN PHYSIOTHERAPY | ECTS (3+0) 5

Ethics, biomedical ethical principles and their role in health system, patient rights and its importance in physiotherapy practice, professional behavior of physiotherapists are morally dependent.

COMPLEMENTARY TREATMENTS IN PHYSIOTHERAPY | ECTS (3+0) 5

Theoretical knowledge and application of complementary treatment approaches used in physiotherapy and rehabilitation.

ADVANCED UPPER EXTREMITY ANATOMY | ECTS (3+0) 5

Anatomical structures of upper extremity and their functions as a theoretical knowledge and practice.

ADVANCED BIOMECHANICS | ECTS (3+0) 5

Basic biomechanical principles, basic mechanical properties, vector analysis, kinetics and kinematics applied to biomechanics, work / energy evaluation methods, biomechanical evaluation of device arrangements.

PAIN EVALUATION AND PHYSIOTHERAPY APPROACHES | ECTS (3+0) 5

Physiological mechanisms of pain, the role of acute and chronic pain in different diseases, methods of pain assessment, basic information about the approaches used in coping with pain.

PHYSIOTHERAPY APPROACHES IN WOMEN'S HEALTH | ECTS (3+0) 5

Gynecological diseases and physiotherapy methods in these diseases, literature studies and innovations related to the issues.

FUNCTIONAL EVALUATION METHODS IN ORTHOPEDICS | ECTS (3+0) 5

Functional evaluation methods for surgery and pathology in all orthopedic problems requiring or not requiring surgery.

ADVANCED NEUROPHYSIOLOGY | ECTS (3+0) 5

Nervous physiology, central nervous system organization, brain and behavior, thalamus, hypothalamus, basal ganglia, cerebellum, reticular formation, control of motor cortex and voluntary movements, reflex, autonomic nervous system, blood-brain barrier and cerebrospinal fluid, speech, learning, memory, pain mechanisms, sleep physiology.

REHABILITATION OF MOTION DISORDERS | ECTS (3+0) 5

Anatomy, physiology and pathophysiology of the basal ganglia, cerebellum and its connections, clinical features of diseases related to these systems, evaluation and physiotherapy rehabilitation approaches, walking analysis with observation, kinetic-kinematic motion analysis, case and research examples from literature, computer aided motion analysis systems.

METHOD AND BASIC PRINCIPLES IN EXERCISE TEST | ECTS (3+0) 5

Exercise tests applied in field and laboratory, monitoring methods, aerobic and anaerobic power tests, functional capacity and evaluation methods of physical activity in patients with cardiac and pulmonary disease.

PHYSIOTHERAPY IN INTENSIVE CARE | ECTS (3+0) 5

Evaluation methods in intensive care patients, use of life support equipment in clinical monitoring and evaluation, mechanical ventilation, physiotherapy and rehabilitation practices, clinical decision making.

EVALUATION IN PULMONARY REHABILITATION | ECTS (3+0) 5

Evaluation of the characteristics of patients with pulmonary problems, clinical laboratory findings, pulmonary function test and arterial blood gases.

EVALUATION IN CARDIAC REHABILITATION | ECTS (3+0) 5

Characteristics of patients with cardiovascular problems, clinical laboratory findings and evaluation of vital signs.

CLINICAL PROBLEM SOLVING IN NEUROLOGICAL REHABILITATION | ECTS (3+0) 5

The role of clinical approaches based on problem solving in the field of neurological rehabilitation, discussing the importance of clinical applications in different neurological diseases.

CLINICAL PROBLEM SOLVING IN ORTHOPEDIC REHABILITATION | ECTS (3+0) 5

Physiotherapy and rehabilitation methods applied in orthopedic diseases, the place and importance of clinical approaches based on problem solving in the field of orthopedic rehabilitation, clinical applications in different orthopedic diseases

CLINICAL PROBLEM SOLVING IN PULMONARY REHABILITATION | ECTS (3+0) 5

Physiotherapy and rehabilitation methods applied in pulmonary diseases, discussion of the role and importance of clinical approaches based on problem solving in the field of pulmonary rehabilitation.

CANCER REHABILITATION | ECTS (3+0) 5

Physiotherapy-rehabilitation programs according to the stages and the patient, pain in patients with cancer, physical, functional and psychological problems and solutions, evidence-based studies on the subject.

CLINICAL PROBLEM SOLVING IN CARDIAC REHABILITATION | ECTS (3+0) 5

Physiotherapy and rehabilitation methods applied in cardiac diseases, place and importance of clinical approaches based on problem solving in cardiac rehabilitation, practical, current studies on clinical applications in different cardiac diseases.

PEDIATRIC REHABILITATION | ECTS (3+0) 5

Pediatric physiotherapy and rehabilitation approaches, clinical application research methodology and report process.

CLINICAL PROBLEM SOLVING IN PEDIATRIC REHABILITATION | ECTS (3+0) 5

Physiotherapy and rehabilitation methods used in pediatric diseases, the role and importance of clinical approaches based on problem solving in pediatric rehabilitation, clinical applications in different pediatric diseases, current studies.

ADVANCED EXERCISE PHYSIOLOGY | ECTS (3+0) 5

Physiological effects of exercise and sport on body systems, physiological mechanisms involved in the development of performance, blood, muscle, respiration, adaptation of the cardiovascular system to exercise, metabolism changes in exercise, acid-base balance, fatigue formation and the effects of fatigue on the individual, environmental factors, condition tests and assessment of fitness, advanced examination of topics.

PERFORMANCE ANALYSIS | ECTS (3+0) 5

Examination of physical performance tests on athletes, application on athletes and writing training programs according to measurement results.

EARLY PHYSIOTHERAPY AFTER ORTHOPEDIC SURGERY | ECTS (3+0) 5

Rehabilitation approaches that will be applied to hospitalized patients in the early period after orthopedic surgery.

DEVELOPMENT OF PHYSICAL COMPATIBILITY AND PERFORMANCE | ECTS (3+0) 5

Using physical fitness test parameters related to health and performance, creating personalized prescription according to the data obtained from the test result.

EVIDENT BASED ELECTROPHYSICAL AGENTS | ECTS (3+0) 5

Basic information on the methods of application of electrophysical agents used in physiotherapy and the level of evidence supported by current studies, seminar presentation of practical examples and practical applications.

BANDING TECHNIQUES | ECTS (3+0) 5

The practical application of banding techniques that can be used in the prevention and treatment of sports injuries and discussing the effectiveness of these techniques in the literature. Classical banding techniques and examples of kinesiotape application.

MUSCULAR TONUS DISORDERS AND REHABILITATION | ECTS (3+0) 5

Mechanism of muscle tone disorders, effects on movement and function, evaluation methods and applied physiotherapy rehabilitation approaches.

NEURODEVELOPMENTAL TREATMENT APPROACHES | ECTS (3+0) 5

The mechanism of action of neurodevelopmental treatment approaches, their effects on the development of movement and function, evaluation methods to be used in clinical decision making and their use in the field of neurological rehabilitation.

GERIATRIC REHABILITATION | ECTS (3+0) 5

Physiological changes that occur along with the progression of age and the necessary exercise and environmental regulation programs for healthy and disabled elderly people for healthy aging.

ASSESSMENT METHODS IN HAND REHABILITATION | ECTS (3+0) 5

Evaluation of bone, joint and motor unit in muscles and nerve diseases of hand and upper extremity, documentation of sensory and motor functions and practical application of these evaluation and casting methods.

CARDIOVASCULAR AND PULMONARY FUNCTIONS IN DISEASES | ECTS (3+0) 5

Cardiopulmonary anatomy, cardiopulmonary physiology, cardiopulmonary pathophysiology, cardiopulmonary involvement in systemic diseases, transport of oxygen.

REHABILITATION IN RHEUMATIC DISEASES | ECTS (3+0) 5

Classification of rheumatic diseases, definitions, effects on musculoskeletal system, physiotherapy in rheumatic diseases, evaluation methods and appropriate rehabilitation approaches.

PRACTICE OF CARDIOVASCULAR AND PULMONARY REHABILITATION | ECTS (3+0) 5

Mobilization and exercise, positioning, physiological basis and clinical applications of airway cleaning techniques, coughing techniques, respiratory facilitation strategies, exercise testing and training in diseases, muscle training, patient training.

NEONATAL AND PEDIATRIC PULMONARY REHABILITATION | ECTS (3+0) 5

Service and intensive care environment, life support equipment used in neonatal and pediatric patients, monitoring, clinical problems, evaluation of neonatal and pediatric patients, physiotherapy and rehabilitation approaches, clinical decision making in different clinical problems.

RESEARCH METHODS AND BIOSTATISTICS | ECTS (3+0) 5

Research planning, selection of research subject, screening of resources, determination of research objectives, determination of sample, determination of data summarization techniques, selection of statistical analysis, explanation of scientific writing rules and basic statistical concepts and methods and examples and practices specific to health. Explain the basic concepts related to biostatistics, comprehend biostatistics and computer, recognize data collection methods, collect accurate and consistent data in the field of health, present the results with tables and graphs, have information about descriptive statistics, decide on appropriate sampling method, parametric and nonparametric To learn hypothesis tests, to establish appropriate hypothesis, to be able to select appropriate test, to make correlation and to perform linear regression analysis, to use SPSS statistical package software in the analysis.

NEUROMUSCULAR DISORDERS AND REHABILITATION | ECTS (3+0) 5

Lower motor neuron diseases, clinical types, differences from upper motor neuron diseases and physiotherapy rehabilitation methods used in these diseases.

TREATMENT APPROACHES IN HAND REHABILITATION | ECTS (3+0) 5

Physiotherapy approaches in the treatment of muscle and nerve diseases in the hand and upper extremity.

KINESIOLOGY OF NORMAL MOTOR | ECTS (3+0) 5

To investigate the neural processes of information process, motor control and learning steps and to investigate the methods of re-learning in pathologies. Theories of neural control of movement, learning about motor movement, mechanisms of movement disorders as a result of neurological pathologies and learning of methodological application and analysis of neural control of movement.

CURRENT PHYSIOTHERAPY APPROACHES IN CEREBRAL PALDIA | ECTS (3+0) 5

Research and planning of current and advanced developmental physiotherapy and rehabilitation approaches, current and technologically supported approaches in the field of rehabilitation and rehabilitation of the problems related to evaluation and analysis in the handicapped group.