#### TC

# USKUDAR UNIVERSITY FACULTY OF HEALTH SCIENCES PHYSIOTHERAPY and REHABILITATION PROGRAMME COURSES CONTENTS

#### FIRST YEAR FALL SEMESTER

#### SBF129 Human Physiology I (3+0) 3 ECTS:4

Concepts related to human physiology, cell physiology, blood, muscle and skeletal system, nervous, cardio-vascular, respiratory, urinary, endocrine system, gastrointestinal system, sensory organs and their physiological structures and functions practically of the fields of physiotherapy will be studied.

# FTR103 Basic Biochemistry(E) (2+0) 2 ECTS:3

This course includes a variety of molecules, their chemical reactions on organism, biochemical processes in human body, carbohydrates, amino acids, nucleic acid and lipid, recognizing and evaluation of normal biochemistry values.

#### SBF143 Applied Basic Anatomy (2+2) 3 ECTS:4

By describing the basic anatomy terms, functional and specialized anatomical structure of all anatomical structures in the body systems that are specially musculoskeletal, nerve and movement system, are also investigated.

#### FTR107 Fundamentals of the Physiotherapy and Rehabilitation (E) (2+0) 2 ECTS:3

Definition of physiotherapy and rehabilitation, content, development, application areas, legal regulations, ethical theories, cause effect models, professional limits, professional and human values, principles of biopsychosocial rehabilitation; patient/employee rights, cultural differences, confidentiality and privacy; needs with multidisciplinary cooperation, communication and legal boundaries with patient/family/colleague/other health team; good clinical practice and Helsinki Declaration; workplace safety; basic information will be covered in the course.

#### ING101 English I (3+0) 3 ECTS:3

This course includes the use of be (present)-meeting people-the use of have got/has gotdescribing people-the use of can and have to-telling the time- the present simple- the use of would liketalking about daily life-the use of there is/there are-the use of be in the simple past tense-regular and irregular verbs and their uses in the past tense- giving dates- present continuous tense-nonprogressive verbs-talking about health-be going to- some phrasal verbs-talking about experiences-the present perfect tense-future- will-past continuous tense-talking about people and places-possibilities-talking about activities.

#### ATA101 Atatürk's Principles and History of Turkish Revolution I (2+0) 2 ECTS:3

This course includes reform movements as a reaction to decline and disintegration of the Ottoman Empire caused by political, social, cultural and socio-psychological problems that emerged as a result of the encounter of the western and Turkish cultures; political events during the transitional period from the Ottoman Empire to the national state and the foundation of the Turkish Republic following the national struggle led by Mustafa Kemal Atatürk.

# TURK101 Turkish Language I (2+0) 2 ECTS:3

This course includes syntactic elements of Turkish language, the sentence types, expression errors, punctuation marks, presentation, poem, essay, composition, story, newspaper, and magazine studies and applications.

#### **RKUL101 University Culture-I (E) (0+2)1 ECTS:1**

This course of university students, social, cultural and political events related intellectual knowledge to have the general curriculum outside the multidisciplinary knowledge in the process of being open, critical and critical thinking and analytical acting ability that aims to give. Students also discussed in public outside their areas of science, technical, social, political and cultural issues in the field of people who are experts attending the seminar will have the ability to comment. Students to college life and joined the program during the seminar will be about 48-50.

# RPSI209 Positive Psychology and Communication Skills (E) (3+0) 3 ECTS:5

This course includes description and basics of positive psychology, theoretical basis of positive psychology, introduction to cognitive neuroscience-cerebral basis of social behavior, self-awareness, familiarization with others and empathy, problem solving skills, motivation and planning, anger management, relationship management, healthy decision making and conflict management. The course includes subjects like the general framework of the basic concepts of communication sciences, solutions and recommendations to strengthen communication skills, interpersonal communication, group communication, organizational communication, mass communication, public communication, international communication and intercultural communication.

#### FIRST YEAR SPRING SEMESTER

#### FTR102 Human Physiology II (3+0) 3 ECTS:4

Concepts related to human physiology, cell physiology, blood, muscle and skeletal system, nervous, cardio-vascular, respiratory, urinary, endocrine system, gastrointestinal system, sensory organs and their physiological structures and functions these are practically for the fields of physiotherapy will be studied.

# FTR104 Biophysics (E) (2+0) 2 ECTS:3

The main areas of study of biophysics, biophysical events such as hearing biophysics, biomechanics, kinesiology, circulatory system and underlying principles in relation to physiotherapy will be dealt in this course.

#### FTR116 Applied Motion Science (1+2) 2 ECTS:3

Functional characteristics of the musculoskeletal system structures are investigated in detail.

#### FTR114 Special Functional Anatomy for Physiotherapy Rehabilitation (4+2) 5 ECTS:5

The anatomical terms of cardiovascular, respiratory and central nervous systems are explained and the functional and specialized anatomical structure of whole body systems is examined.

# **PSİ131 Psychology (E) (3+0) 3 ECTS:4**

This course covers the basic concepts and theories of psychology, biological bases of behavior, psychosocial changes in developmental learning, memory, language and thinking, basic impulses and instincts, emotions and excitations, social intelligence, relationships, social participation and communication with pain, functional disorders and disability and interactions between physiotherapy applications.

#### **ING102** English II (3+0) 3 ECTS:3

This course includes simple past tense, countable and uncountable nouns, some / any / a few / a little, comparatives and superlatives, present continuous, possessive pronouns, going to future tense adverbs and adjectives, present perfect tense.

#### ATA102 Atatürk's Principles and History of Turkish Revolution II (2+0) 2 ECTS:3

This course includes reform movements as a reaction to decline and disintegration of the Ottoman Empire caused by political, social, cultural and socio-psychological problems that emerged as a result of the encounter of the western and Turkish cultures; political events during the transitional period from the Ottoman Empire to the national state and the foundation of the Turkish Republic following the national struggle led by Mustafa Kemal Atatürk.

#### TURK102 Turkish Language II (2+0) 2 ECTS:3

This course includes the students with knowledge on the status and importance of language as a social structure of a nation, language-culture relations, the place of Turkish among other languages with its historical development and spread.

#### RKUL102 University Culture-II (E) (0+2) 1 ECTS:1

This course of university students, social, cultural and political events related intellectual knowledge to have the general curriculum outside the multidisciplinary knowledge in the process of being open, critical and critical thinking and analytical acting ability that aims to give. Students also discussed in public outside their areas of science, technical, social, political and cultural issues in the field of people who are experts attending the seminar will have the ability to comment. Students to college life and joined the program during the seminar will be about 48-50.

#### SECOND YEAR FALL SEMESTER

#### FTR201 Basic Assessment and Evaluation in PT (2+2) 3 ECTS:5

Taking a story in physiotherapy and rehabilitation (age, height, weight, work/play/school status, development, living environment, pedigree, medical story, functional status, recording of activity level), observational analysis (skin color, skin integrity, skar tissue, edema presence), body structure, posture (dynamic, static, voluntary), anthropometric measurements, muscular strength, muscular endurance, flexibility, range of motion (passive, active, functional), coordination, basic measurement and evaluation methods evaluation and interpretation with basic measurement and evaluation methods will be covered in the course.

#### FTR219 Manipulative Therapy I (1+2) 2 ECTS:4

The mechanical, physiological, psychological and reflex effects of the original massage techniques (classical massage, connective tissue, therapeutic massage, manual lymph drainage) and evaluation methods to be used in determining the post-application activity will teach. Indications and contraindications of the methods to teach; clinical samples in the biopsychosocial framework, patient safety, evaluation and analytical approaches and deciding which of the effective techniques will educate in the course.

#### FTR205 Electrotherapy I (2+2) 3 ECTS:5

The indications, contraindications, usefulness and application forms of electrotherapeutic and electrophysical agents (iontophoresis, TENS, interferential currents, pharyngeal stimulation, high voltage galvanic stimulation, neuromuscular electrical stimulation, electrical muscle stimulation, biofeedback, etc.) that will support of evidence based physiotherapy and rehabilitation program and interpretation of the electrophysiological responses of injured peripheral nerves will educate in the course.

#### FTR 207 Heat, Light and Hydrotherapy (1+2) 2 ECTS: 3

Assessment of pain physiology and parameters (type, severity, frequency, localization, pattern, style), inflammation, soft tissue healing process, effects of immobilization, degeneration and regeneration processes; (ice bath, cryotherapy, cold pack, etc.), laser and hydrotherapy (opposite baths, pools, whirpool, baths) methods used in physiotherapy and rehabilitation basic principles and application methods of physical principles, physiological effects, application methods, indications, contraindications and hazards with examples will be covered.

#### FTR209 Development of Movement and Function (0+2) 1 ECTS:2

Normal motor development, reflexes, functions of the child will be studied.

#### FTR211 Internal Medicine (3+0) 3 ECTS:3

Hematology, infectious disease, endocrinology, geriatrics, cardiology, pulmonology, laboratory tests, approach to the patient with arthritis, gastrointestinal and renal diseases, approach to patients with back pain, connective tissue diseases, and drugs used in rheumatology will be discussed.

# FTR213 Neurological Science (1+0) 1 ECTS: 2

Neurological evaluation, cerebral palsy, epilepsy, neuromuscular disorders, movement disorders, central nervous system infections - viral paralytic disease, degenerative diseases of the central nervous system, spinal cord diseases, polyneuropathy, extrapyramidal system disease, entrapment neuropathies, demyelinating disease, cerebellar system diseases, cerebrovascular diseases, medical and surgical treatment of muscle diseases in children and adults will be processed within the course.

#### BES259 PRINCIPLES of NUTRITION (E) (2+0) 2 ECTS:2

The importance of carbohydrates, protein, lipid, vitamin and minerals in healthy nutrition, the chemical structure, prooerties, classification and functions of carbohydrates, protein, lipid, vitamin and minerals, the sources, daily allowences and excess intakes of carbohydrates, protein, lipid, vitamin and minerals, energy metabolism, the importance of water and electrolytes in human body function, nutrition in special conditions, the importance of foods in specific food groups will be discussed and evaluated

## RPRO109 Entrepreneurship and Project Culture (2+0) 2 ECTS:3

This course includes comprehensive information about graduation project implementation instead of graduation project, student-centered, bringing all academicians for determining a

goal for real life, discovering new things, problem solving, time management skills and community service.

#### SECOND YEAR SPRING SEMESTER

#### FTR202 Basic Exercise Practice (2+2) 3 ECTS:5

In this course focus to prepare the therapeutic exercise program in physiotherapy and rehabilitation are frequently used such as range of motion exercises, in-bed exercises, tilt table, stretching exercises, strengthening exercises (for head, neck, low back, extremities), isokinetic exercises, aerobic exercises, relaxation exercises (breathing and motion strategies, relaxation techniques), open and closed chain exercises, balance and proprioceptive exercises, plyometric/agility exercises, dynamic lumbar stabilization exercises, compression therapy, intermitant/continuous traction applications and continuous passive motion (CPM) topics will be covered.

# FTR204 Manipulative Therapy II (2+2) 3 ECTS:5

Functional anatomy of joints and soft tissues, physiology, biomechanics and pathomechanics; effects of immobilization; basic features of joint / soft tissue manipulation, mobilization, manual traction and transverse friction techniques, indications, side effects and contraindications; basic measurement, evaluation and different manual therapy applications on joint and soft tissue pathophysiology and healing phases; the effects of manual techniques on muscle activity; principles of neuromotor and manual techniques and principles of physiotherapy specific application; clinical practice in biopsychosocial frameworks, patient safety, evaluation and analytical approaches, deciding which one is effective, and patient positioning and technique application skills will be covered in the course.

#### FTR206 Electrotherapy II (2+2) 3 ECTS:5

Ultrasound, phonophoresis, shortwave diathermy, radar, microwave diathermy, magnetic field etc. which will support the physiotherapy and rehabilitation program. determination of electrotherapeutic agents, application patterns and problem solutions will be examined.

#### FTR208 Exercise Physiology (1+2) 2 ECTS: 3

Exercise and sport on body systems; modification of exercise and activity in unexpected and special situations in pathology; exercise biology and physiology; rest, inactivity (loss of motion) and immobilization resulting in blood pressure, heart rate and physiological changes in the muscles; adaptations that are excited by exercise; factors determining the exercise program in health and disease; physiological responses that the cardiac and pulmonary system emerge in sedanter and exercising individuals, followed by exercise tests and exercises will be covered.

#### FTR216 Clinical Neuroanatomy (0+2) 1 ECTS: 3

The aim of the course is to understand the features and functions of the central, peripheral, and autonomic nervous systems and to solve and treat the functional problems of these systems dysfunction.

#### FTR212 Pathology (2+0) 2 ECTS:2

The aim of this course is to understand of the basic principles of the pathology, to learn of the development of the etiology of disease mechanisms and to understand methods used are not knowledgeable about the pathology.

#### FTR214 Surgical Sciences (2+0) 2 ECTS:3

To give basic level theoretical information about common diseases in orthopedics, neurosurgery and obstetrics and gynecology and to teach basic information for the assessment and treatment of these diseases.

# FTR290 Basic Physiotherapy Rehabilitation Practice (0+0) 0 ECTS:4

This four weeks summer practice aims to develop the skills in physiotherapy and rehabilitation techniques.

#### THIRD YEAR FALL SEMESTER

#### FTR301 Neurophysiological Approaches I (2+2) 3 ECTS:5

The definition, basic principles, treatment, motion patterns, aquatic applications and rehabilitation approaches of the Proprioceptive Neuromuscular Facilitation (PNF) techniques will be processed within the course.

#### FTR321 Orthopaedic Rehabilitation (3+0) 3 ECTS:4

Basic principles of orthopedic physiotherapy and rehabilitation techniques and physiotherapy and rehabilitation approaches for pathology leading to musculoskeletal disorders; the effects of walking aids on weight transfer and their results; upper and lower extremity functions and pathologies; the consequences and causes of functional limitations and disorders and the training and treatment strategies of individuals against them will be covered.

#### FTR305 Occupational Therapy (E) (1+2) 2 ECTS:3

Home-work-related factors affecting the function related to ergonomics principles and physiotherapy and rehabilitation practices, daily life and self-care activities, types of reaching and gripping, use of necessary assistive devices, physiotherapy applications for improving upper extremity function, strategies for functional and heritable limitations transfer training (bathroom, toilet, bed, wheelchair), housework, housekeeping, home improvement, home improvement, home improvement, care strategies, dressing-eating-bathtoilet activity training courses will teach in the course.

#### FTR323 Pediatric Rehabilitation (3+0) 3 ECTS:4

Specific evaluations of physiotherapy and rehabilitation applied in pediatric special populations (cerebral palsy, musculoskeletal dysfunctions) (story, school / play situation, functional status / limitation, activity level, primitive / postural reflexes / reactions, muscle tone, posture, walking, balance, locomotion, assistive device, cognitive status, skin integrity depending on the equipment used). Indications / contraindications of treatment modalities (postural control, stabilization, awareness training, neuromuscular training, motor-sensory training, locomotion / walking training, neurodevelopmental activity training, neuromuscular training, assistive / protective devices and equipment training and education) effects of therapeutic exercise applications, disorder-activity-participation approach. In addition, school and play activities of the equipment will be provided with training.

#### FTR325 Prosthetics and Rehabilitation (E) (3+0) 3 ECTS:4

Bandage techniques applied in upper and lower extremity amputees, use of protective, supporting and assisted prosthetic devices; points to consider for skin health, protection of skin integrity and wound care; selection of prosthesis, adjustment of prosthesis components, provision of safe activities in functional activities or sprouting, and prosthodontic care. will be processed within the course.

#### FTR311 Pulmonary Rehabilitation (2+2) 3 ECTS:4

In this course, the cardiorespiratory system defines the pathologies and functional deficiencies leading to respiratory system disorders, evaluates the pulmonary system during exercise-rest; gaining and practicing the rehabilitation program in the light of evaluation results; ability to apply airway cleaning techniques (aspiration, use of mechanical assist devices, positioning, postural drainage, percussion, vibration, shaking, cough maneuvers, oxygenation etc.), patient positioning, active respiration techniques, the techniques of huffing, breath control strategies, maximum ventilation techniques, how to strengthen respiratory muscles, coping strategies with dyspnea and exercise approaches known; blood pressure, pulse and respiratory parameters; patient / family / colleagues / other health workers training physiotherapy; plans, arranges and teaches the way of life and its modifications; individual and group counseling.

#### FTR313 Clinical Biomechanics and Kinesiology I (2+2) 3 ECTS:4

The biomechanical properties and pathomechanics of movements and mechanical principles, bones, muscles, collagen, cartilage and soft tissue, features of body joints, equilibrium, orientation planes and coordinates and normal and pathological walking courses will teach.

#### FTR315 Radiological Imaging Techniques (E) (1+0) 1 ECTS:1

The basic principles of radiological imaging, radiography, computed tomography and magnetic resonance imaging in the extremities, spine and thoracic are studied.

#### SBF202 Pharmacology (E) (2+0) 2 ECTS: 2

The basic principles of pharmacology, pharmaceutical indication and contraindications, and the situation must be considered during physiotherapy application in patients with drug will be studied.

#### THIRD YEAR SPRING SEMESTER

#### FTR302 Neurophysiological Approaches II (2+2) 3 ECTS:5

After hemiplegia, clinical features are seen and different neurophysiological approaches used in treatment (New Bobath, Johnston, Brunnstrom etc); neuroplasticity, motor control and motor learning theory and principles; before and after rehabilitation, functions and structers can be evaluated with physiotherapy methods and; drew and applied of rehabilitation program with considering biopsychosocial effect and results; recognize and manage muscular tonus/spasticity topics will be processed within the course.

#### FTR304 Neurological Rehabilitation (2+2) 3 ECTS:4

Clinical features of central and peripheral nervous system diseases, measurement evaluation methods used in neurological rehabilitation besides physiotherapy evaluation methods (spasticity, static/dynamic/functional balance, coordination, locomotion, transfer, special scales, deep tendon reflexes, primitive reflexes, behavior / emotional state, cognitive status, language and learning situation, consciousness level, orientation, communication skills, attention level), reviewed specific physiotherapy rehabilitation and non-physiotherapeutic approaches for patients; management and practice of acute / chronic period problems by considering problems of neurological structure/function/activity/participation level of the patient; motor learning strategies topics will be processed within the course.

#### FTR320 Orthotics and Rehabilitation (2+2) 3 ECTS:4

The rehabilitation and plan of patient-specific assistive devices, corsets, splints and their recognition, functional kinematics, ergonomics and mobility principles, patient-specific orthosis selection, orthosis types, indications, applications, modifications, patient compliance, safe and functional use will be processed within the course.

#### FTR308 Cardiac Rehabilitation (2+2) 3 ECTS:4

In the scope of this course, cardiovascular problems and dysfunctions are defined; arterial, venous, lymphatic circulation, aerobic capacity, the cardiovascular system during exercise-rest evaluating; acquire the appropriate rehabilitation program and practice skill; blood pressure, pulse and respiratory parameters; patient / family / colleagues / other health workers training physiotherapy; plans, arranges and teaches the way of life and its modifications; individual and group counseling.

# FTR310 Rehabilitation in Sports (E) (1+2) 2 ECTS:3

Definition of sport rehabilitation, measurement-evaluation (ability, coordination, agility, endurance, proprioceptive sense, lower and upper extremity functions), selection of orthosis, identification of protective / supporting equipment; rehabilitation of the athlete to return to the sport (postural control, motor control, balance, strength, endurance, power, flexibility, agility, coordination, muscle re-eduction, proprioceptive sense) and things to do for the prevention or reduction of injuries will be covered.

## FTR312 Special Issues in Physiotherapy (E) (1+2) 2 ECTS:3

In this course, appropriate evaluation, treatment principles and rehabilitation approaches for physiotherapy and rehabilitation principles in cancer, neuropathies, geriatrics, burns, peripheral nerve injuries, women's health, rheumatic diseases, swallowing disorders, pain, diabetes, obesity, metabolic syndrome, home care and intensive care will teach.

#### FTR314 Clinical Biomechanics and Kinesiology II (2+2) 3 ECTS:4

Pathology of columna vertebralis, anatomical and mechanical properties; anatomical, kinematic and kinetic features of the pelvis, hip, knee, foot / ankle, shoulder-arm complex, elbow, handwrist and pathological conditions of the spine and their relation to each other will be covered.

#### FTR316 Preventive Physiotherapy Rehabilitation Approaches (E) (1+0) 1 ECTS:2

Identification of basic concepts related to health and conditions affecting health, identification the roles of health professionals in planning and directing the services for improving and protecting the health and teaching preventive physiotherapy services are aimed.

#### FTR318 Hand Rehabilitation (E) (0+2) 1 ECTS:2

To describe common hand and upper extremity problems, clinical examination of the hand and key aspects of the rehabilitation approaches.

#### FOURTH YEAR FALL SEMESTER

#### FTR401 Clinical Decision in Physiotherapy I (0+2) 1 ECTS:2

In cases with different clinical diagnosis to determine the appropriate treatment strategies are studied.

#### SBF137 Research Methods in Health and Epidemiology (E) (3+0) 3 ECTS:4

The aim of this course is to ensure that students understand the basic concepts, principles and methods involved in the research process; formulate the basic steps involved in a planned research; and gain the ability to read and understand related literature. Through this course, the student is provided with the opportunity to understand epidemiological methods, general characteristics of epidemiological research and to scientifically evaluate previous research.

#### FTR403 Clinical Practice in Basic Physiotherapy Rehabilitation (0+8) 4 ECTS:6

Developing and implementing appropriate treatment strategies with different clinical diagnoses, approaching the case, interdisciplinary communication, collecting, recording, interpretation and effective use of resources will be experienced. Within the scope of the clinical study, the patient and his / her relatives will learn how to be trained and informed about how to intervene in the medical situation.

# FTR405 Clinical Practice in Neurological Rehabilitation (0+8) 4 ECTS:6

In hospital and outpatient clinic with acute and chronic neurological diseases, affect central and peripheral nervous system, to contribute to transfer the previous theoretical knowledge and skills to the clinical study of students. To develop case-specific clinical problem solving and decision-making skills and to contribute to the development of attitudes interdisciplinary field of neurological rehabilitation.

#### FTR407 Clinical Practice in Pediatric Rehabilitation (0+8) 4 ECTS:6

For students; to contribute to transfer the previous theoretical knowledge and skills to the clinical study of students, to develop case-specific clinical problem solving and decision-making skills, to apply and guide home based rehabilitation programme for families to contribute to the development of attitudes inter and intra disciplinary field of pediatric rehabilitation on mainly cerebral palsy (CP) and pediatric neuromuscular disorders, childhood disabilities of from birth to eighteen years process, high risk infant, pervasive developmental disorders, torticollis, brachial plexus paralysis, spina bifida, genetic problems, chromozomal anomalies, developmental problems due to musculoskeletal problems of children.

# FTR409 Clinical Practice in Sport Rehabilitation (E) (0+6) 3 ECTS:4

According to sports medicine to contribute to transfer the previous theoretical knowledge and skills to the clinical study of students. To develop case-specific clinical problem solving and decision-making skills and to contribute to the development of attitudes interdisciplinary field of physiotherapy in sports.

#### FTR411 Clinical Practice in Occupational Physicaltherapy (E) (0+6) 3 ECTS:4

Physiotherapy and rehabilitation practical applications for treatment and evaluation in adult and pediatric, occupational therapy applications.

#### FTR413 Clinical Practice in Geriatric Rehabilitation (E) (0+6) 3 ECTS:4

For students, acute, subacute and chronic Geriatric Rehabilitation, contributing to the can transfer to clinical trials prior theoretical knowledge and skills, case-specific clinical problem solving, improve their ability to make decisions and interdisciplinary in the field of rehabilitation on these issues and to contribute to the development of work attitudes.

#### FTR415 Clinical Practice in Neurosurgical Rehabilitation (E) (0+6) 3 ECTS:4

Nervous system, medulla spinalis and cortex tumors and medulla spinalis lesions to contribute to transfer the previous theoretical knowledge and skills to the clinical study of students. To develop case-specific clinical problem solving and decision-making skills and to contribute to the development of attitudes interdisciplinary field of neurological rehabilitation.

#### FTR417 Clinical Practice in Oncologic Rehabilitation (E) (0+6) 3 ECTS:4

The aim of the course is to give the students basic skills and knowledge about designing physiotherapy and rehabilitation in oncology.

## FTR419 Clinical Practice in Rehabilitation of Swallowing Disorders (E) (0+6) 3 ECTS:4

The aim of this course is to evaluate oral motor functions and to transfer the knowledge about evaluation and therapy approaches of swallowing disorders to clinical area, to gain skills about them, to develop case-specific clinical problem solving and decision-making skills and to contribute the development of attitudes in interdisciplinary field.

# FTR421 Home Physiotherapy and Rehabilitation Services (E) (0+6) 3 ECTS:4

Providing to comprehend physiotherapy and rehabilitation services in home care; developing competence related with appropriate interventions and to transfer to practical skills.

# FTR423 Clinical Study of Physiotherapy and Rehabilitation in Industry (E) (0+6) 3 ECTS:4

Evaluation methods used in industry; work analysis, working capacity, ergonomic analysis, etc.), vocational rehabilitation and training methods used in the assessment, training and role of physical therapists in the protective industrial approaches, basic information about home and environmental arrangements to ensure understanding and problem solving with application examples ability to develop.

#### FOURTH YEAR SPRING SEMESTER

#### FTR402 Clinical Decision in Physiotherapy II (0+2) 1 ECTS:2

In cases with different clinical diagnosis to design and to apply the appropriate treatment strategies are studied.

#### SBF125 Biostatistics (E) (2+0) 2 ECTS:3

Research planning and execution in appropriate for ethical principles in the field of health; To teach basic statistical concepts and methods to students by examples and applications in health sciences, to provide understanding and evaluating the statistical analysis used in the literature for their own study fields.

#### FTR406 Clinical Practice in Orthopaedic Rehabilitation (0+8) 4 ECTS:6

To evaluate the patients with orthopaedic problems in pre-and post operative periods; to plan, apply and to follow-up their rehabilitation programs.

#### FTR408 Clinical Practice in Cardiaopulmonary Rehabilitation (0+8) 4 ECTS:6

The aim of the course is to give the students basic skills and knowledge about designing cardiopulmonary physiotherapy and rehabilitation

#### FTR410 Clinical Practice in First Step Health Care Services (E) (0+6) 3 ECTS:4

The aim of the course is to; - give the students basic skills and knowledge about designing Physiotherapy and Rehabilitation in First Step Health Care Services - develop skills in planning and approaches physical therapy and rehabilitation in First Step Health Care Services and community health service unit.

#### FTR412 Clinical Practice in Prosthetics Orthotics Rehabilitation (E) (0+6) 3 ECTS:4

The aim of the course is to give the students; basic skills and knowledge about designing prosthetics and orthotics programs, and different applications in various in unit.

#### FTR414 Clinical Practice in Hand Rehabilitation (E) (0+6) 3 ECTS:4

To increase students ability to transfer their theoretical knowledge and skills about orthopedicrehabilitation particularly in upper extremity, hand and peripheral nerve injuries to the clinical settings. To improve clinical thinking, clinical reasoning and clinical decision making by working with case To contribute to better understanding of interdisciplinary and multidisciplinary attitudes orthopedic rehabilitation.

#### FTR416 Clinical Practice in Rheumatological Rehabilitation (E) (0+6) 3 ECTS:4

According to rheumatic diseases to contribute to transfer the previous theoretical knowledge and skills to the clinical study of students. To develop case-specific clinical problem solving and decision-making skills and to contribute to the development of attitudes interdisciplinary field of rehabilitation in rheumatic diseases.

#### FTR418 Clinical Practice in Back and Neck Health Rehabilitation (E) (0+6) 3 ECTS:4

To contribute to be able to transfer to clinical trials prior theoretical knowledge and skills in chronic outpatient followed by low back and neck pain problems, case-specific clinical problem solving, interdisciplinary in developing decision-making skills and physiotherapy fields to contribute to the development of work attitudes.

#### FTR420 Clinical Practice in Women Health Rehabilitation (E) (0+6) 3 ECTS:4

To give experience to students about the assessments and suitable physiotherapy approaches for the issues in which women health physiotherapists have a role.

#### FTR422 Clinical Practice in Psychiatric Rehabilitation (E) (0+6) 3 ECTS:4

The aim of the course is to give the students, to gain knowledge and skills to students applications in physiotherapy and rehabilitation in psychiatry.

# FTR424 Clinical Study of Physiotherapy and Rehabilitation in Internal Diseases (E) (0+6) 3 ECTS:4

The aim of this course is to provide knowledge and skills about physiotherapy and rehabilitation's application, evaluation and treatment options related to internal and rheumatological diseases that physiotherapists frequently encounter.