

1 theory + 2 Practical = 3 credits	Gait and locomotion Analysis	DPT 411
<p>المتطلب السابق:</p> <p>Human Biomechanics</p> <p>HPT 333</p> <p>Test and Measurements</p> <p>(2)</p> <p>HPT 224</p>	<p>In this course the student will learn the phases of normal gait cycle. Methods of assessment and analysis to detect gait abnormalities.</p> <ol style="list-style-type: none"> 1- Student should be able to evaluate patients with gait and locomotion disorders, identify patient's problems and implement the proper physical therapy modality and/ or technique according to biomechanical point of view. 2- A sound understanding of kinesiology allows for the development of a rational evaluation, a precise diagnosis, and an effective treatment of musculoskeletal disorders, and allows for safe, appropriate exercise prescription for gait and locomotion problems. 3- Student should practice within the ethical and professional standards of the health institution. 	

2 theory = 2 credits	Clinical Management & administration	DPT 412
<p>المتطلب السابق:</p> <p>Management & organization in PT</p> <p>HPT 452</p>	<p>This course designed to assist the students to develop management skills, resolve conflict, and manage a medical unit.</p>	

2 theory + 1 Practical = 3 credits	Exercise physiology	DPT 413
<p>المتطلب السابق:</p> <p>Human Physiology</p> <p>HPT 216</p>	<p>This course designed to assist the students to develop management skills, resolve conflict, and manage a medical unit.</p>	

1 theory + 2 Clinical = 3 credits	Sports Injuries	DPT 414
<p>المتطلب السابق:</p> <p>Traumatology</p> <p>HPT 414</p>	<p>Explores the application of physiology of rest and exercise, principles of exercise testing and prescription for specific populations relevant to physiotherapy practice. Develops an understanding of the use of exercise as a means of health promotion, injury prevention and rehabilitation.</p> <ol style="list-style-type: none"> 1. Differentiate between strength, Power, and Endurance of Muscles. 2. Understand the muscle Metabolic Systems in Exercise. 3. Identify the effect of exercise Training on Muscles and Muscle Performance. 4. Understand the pulmonary regulation ventilation during exercise. 5. Understand the cardiovascular response to exercise. 6. Identify the age-related changes in exercise physiology. 7. Know the effects of training on Older Adults 	

2 theory = 2 credits	Clinical Psychiatry	DPT 415
<p>المتطلب السابق:</p> <p>Psychosocial aspects of health and disease</p> <p>HPT 334</p>	<p>The course aims to focus on essential topics on the etiology and symptomatology and theories of psychiatric disorders and the diagnostic classification systems.</p> <p>-Anxiety Disorders: Panic disorder, agoraphobia, Specific, social phobia, obsessive compulsive disorder, post-traumatic stress disorder, acute stress disorders generalized anxiety disorder, mood disorders (Depression and Bipolar; Dysthymia and Cyclothymic disorders; other mood disorder). Somatoform Disorders: Somatization, Pain disorders, Conversion, Hypochondriasis, Body Dysmorphic. Adjustment Disorders: Adjustment disorder with anxiety, depression, conduct disorder. Delirium, Dementia, Amnestic and other Cognitive Disorders, Disorders first diagnosed in Infancy and childhood (Autism, Pervasive developmental disorders. Mental Retardation). Schizophrenia and Psychotic Disorders, personality disorders, substance related disorders, brief introduction to Psychotherapies and Biological therapies. The course focuses on clinical examination of Psychiatric patient and on the psychological measures. Rehabilitation Psychology for mental and Personality disorders will also be emphasized.</p>	

2 theory + 1 Practical = 3 credits	Electro diagnosis in PT	DPT 421
<p>المتطلب السابق:</p> <p>Neurophysiology HPT 222</p> <p>Pathophysiology HPT 223</p>	<p>This course is designed to review current concepts of electro diagnostic procedures and equipments, demonstrate the basic principles and procedures of the electro diagnostic modalities, differentiate what factors could affect the validity and reliability of the values in all electro diagnostic modalities, List the advantages and disadvantages of the previous modalities, List indications, contraindications, dangers and precautions including techniques of applications, Planning and managing the appropriate way of application for each electro diagnostic procedures. And demonstrate and acquire meaningful communications for instruction to the patient and ensure his/her comfort throughout the application.</p>	

1 theory + 2 Clinical = 3 credits	Advanced Clinical Neurology	DPT 422
<p>المتطلب السابق:</p> <p>Clinical neurology HPT 413</p>	<p>The purpose of this course is to</p> <ul style="list-style-type: none"> • Recognize the different neurological diseases. • Develop a clear understanding of the etiology, pathology, prognosis and clinical feature of the most common neurological diseases affecting adult people. • Apply different evaluation methods to identify problem of various neurological diseases. • Clinically conduct the sensory, motor functional, and co ordination assessments. • Clinical competence in handling and communicating with patients in hospital. 	

1 theory + 2 Clinical = 3 credits	Advanced Clinical pediatrics	DPT 423
<p>المتطلب السابق:</p> <p>Clinical practice in Pediatrics</p> <p>HPT 415</p>	<p>This course will provide the student with the opportunity to develop clinical skills in evaluation and treatment of different cases of pediatrics in affiliated hospital.</p> <p>1.This course will provide the student with the opportunity to develop clinical skills in evaluation and treatment of different cases of pediatrics in affiliated hospital.</p> <p>2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)</p> <p>Using software in teaching this course, the goal was to improve “concept building and learning” in students by combining a research-based approach to learning with research- grade computational software.</p>	

1 theory + 2 Clinical = 3 credits	Advanced Clinical Cardiopulmonary	DPT 424
<p>المتطلب السابق:</p> <p>Cardiopulmonary Physical therapy</p> <p>HPT 331</p>	<p>Summary of the main learning outcomes for students enrolled in the course:</p> <p>1- Student should be able to evaluate patients with cardiopulmonary disorders, identify patient’s problems and implement the proper physical therapy modality and/ or technique.</p> <p>2- Student should be capable of measuring the effectiveness of cardiopulmonary Physical Therapy rehabilitation program.</p> <p>3- Student should practice within the ethical and professional standards of the health institution</p>	

1 theory = 1 credits	Pharmacology in rehabilitation	DPT 425
<p>المتطلب السابق:</p> <p>Clinical Pharmacology for Physiotherapist</p> <p>HPT 316</p>	<p>The course provide the student the differences between pharmacodynamics and pharmacokinetics. How to gain knowledge about advantages and disadvantages of different routes of drug administration ,knowledge about the clinical use of drugs and drug-drug interactions. The drugs used in cardiovascular diseases (cardiotonic drugs, anti-hypertensive, antiarrhythmics, antianginals and diuretic drugs) ,the ability able to classify the drugs used in the disorders of nervous system and to know the main members in each group.</p>	

1 theory + 2 Practical = 3 credits	Deferential Diagnosis in Clinical Neurology	DPT 431
<p>المتطلب السابق:</p> <p>Clinical neurology</p> <p>HPT 413</p>	<p>This course is designed to</p> <ol style="list-style-type: none"> 8. identify the basic principles and procedures relating to some differential diagnosis of the neurological cases 9. Apply the different diagnostic methods in neurological conditions. 10. Planning and managing the appropriate way of application for each evaluation method. 11. Demonstrate and acquire meaningful communications for instruction to the patient and ensure his/her comfort throughout the evaluation 	

2 theory = 2 credits	Ethics & Professionalism in PT	DPT 432
<p>المتطلب السابق:</p> <p>Introduction to physical therapy HPT 213</p>	<p>Professional communications and issues related to the practice of physical therapy. This course allows student to enhance patient interaction through the development of professional communication skills, to explore professional ethics, to develop appropriate documentation skills and to foster a professional identity.</p> <ol style="list-style-type: none"> 1. Understand the organization of Physical Therapy Services 2. Communicate in a professional manner with patients, family members and all members of the health care team. 3. Identify and act with consideration for patient's cultural diversity, values, beliefs, preferences and expressed needs. 4. Understand the positive and negative consequences of your actions and modify conduct accordingly. 5. Review peer and self assessments and modify behavior accordingly. 6. Demonstrate integrity and practice ethical decision making that is consistent with applicable professional code of ethics, including the APTA's Code of Conduct and Core Values. <p>Perform peer and self assessments after class activities to improve effectiveness of communication and patient care.</p>	

2 theory + 1 Practical = 3 credits	Evidence based Practice	DPT 433
<p>المتطلب السابق:</p> <p>Pathophysiology</p> <p>HPT 223</p>	<p>This course is designed to review current concepts of evidence-based practice and integrate these concepts to physical therapy clinical practice. The student will apply evidence-based practice to a physical therapy related topic of the student's choice. Application of these concepts will include critically evaluating relevant evidence in the literature, preparing literature for presentation to other medical professionals, and preparing an algorithm (decision tree) for use in the clinical setting. Course materials will be applied to a clinical case-based research project.</p> <ol style="list-style-type: none"> 1. The student will be able to express the concepts and steps used in evidence-based practice. 2. The student will be able to critically evaluate the evidence. 3. The student will be able to successfully search for evidence. 4. The student will construct a review of the literature and produce an algorithm to communicate that literature to colleagues. 5. The student will be able to discuss the importance of evidence-based practice with other health care professionals. 6. The student will be able to defend their clinical decisions with the evidence they present to other health care professionals. 7. The student will use computer-based technology for accessing course materials, library research, data collection and preparation, and communication (e.g., threaded discussions). 8. The student will apply course materials to a clinical case-based research project. 	

1 theory + 1 Clinical = 2 credits	Electro therapeutic Modalities: Clinical Applications	DPT 434
<p>المتطلب السابق:</p> <p>Electrotherapy & Hydrotherapy</p> <p>HPT 315</p>	<p>This course is designed to review current concepts of electrotherapy, identify the basic principles and procedures relating to some of the electrotherapy modalities, explain the physiological and therapeutic effects of the different electrotherapeutic modalities, discuss the advantages and disadvantages of the previous modalities. and Identify indications, contraindications, dangers and precautions of each techniques of applications.</p> <p>List basics of Electrotherapy</p> <p>Define knowledge about Heat modalities.</p> <p>Label knowledge about Electromagnetic radiation.</p> <p>Summarize the patient's problem</p> <p>Reorganize the short and long term goals of the electrotherapy protocol.</p> <p>Explain the effectiveness of electrotherapy protocol.</p>	

1 theory + 1 Practical = 2 credits	Scientific Seminar	DPT 435
<p>المتطلب السابق:</p> <p>Research in Physical Therapy (2)</p> <p>HPT 434</p>	<p>Firstly, the Seminar is focused on searching and reading contemporary academic literature on Physical Therapy.</p> <p>Secondly, the seminar is focused on academic writing (in particular, writing of Seminar paper) and seeking for research topics, in contemporary literature. The goal is also to form teams concentrating on common topics.</p> <p>Thirdly, the goal is to practice presentation of a scholarly topics, chosen by participants.</p> <p>Fourthly, academic writing conventions in physical therapy are be presented, including a presentation of examples of well written and poorly written texts.</p>	

1 theory + 1 Practical = 2 credits	P.T Medical Screening	DPT 436
<p>المتطلب السابق:</p> <p>Diagnostic Imaging for Physiotherapist</p> <p>HPT 416</p>	<p>This Course helps to prepare the physical therapy to assume the role of an independent practitioner working within a collaborative medical model .Inherent in this role is the ability to recognize clinical manifestations that suggest physician or other health care provider contact is warranted regarding a patient’s health status .Students apply the concept of threshold detection to identify impairments or “red flags” in medical screening that warrant referral to other professionals. An examination scheme is designed to promote efficient and effective collection of patient data to provide the structure for discussions. Patient cases are presented to illustrate important medical screening principles professional communication with patients and physicians is also a central theme.</p> <p>To understand medical screening evaluations of patients</p> <ol style="list-style-type: none"> 2. To identify clusters of signs and symptoms of different systems 3.To learn the referred pain patterns originating from visceral organs. 4. To appreciate the importance of sensitivity and specificity of clinical tests. 6. To identify which conditions would require immediate medical referral (differentiate red flags and yellow flags). 	

1 theory + 1 Practical = 2 credits	Differential Diagnosis in Clinical Orthopedic	DPT 441
<p>المتطلب السابق:</p> <p>Physical Therapy for Orthopedics and Rheumatology</p> <p>HPT 433</p>	<p>This course is designed to</p> <ol style="list-style-type: none"> 12. identify the basic principles and procedures relating to some differential diagnosis of the neurological cases 13. Apply the different diagnostic methods in neurological conditions. 14. Planning and managing the appropriate way of application for each evaluation method. 15. Demonstrate and acquire meaningful communications for instruction to the patient and ensure his/her comfort throughout the evaluation 	

1 theory + 2 Clinical = 3 credits	Advanced Clinical orthopedics	DPT 442
المتطلب السابق: Physical Therapy for Orthopedics and Rheumatology HPT 433	This course will provide the student with the opportunity to develop clinical skills in the evaluation and treatment of different cases of orthopedics in affiliated hospital such as: Temporomandibular dysfunction and sacroiliac joint dysfunction	

1 theory + 1 Practical = 2 credits	Physical therapy management of complex patients	DPT 443
المتطلب السابق: P.T Medical Screening DPT 436	This course describes the examination, intervention, and outcomes for a patient with Complex disorders whom suffers from many problems and need many team members and highly costive and whom have many functional limitations including those with chronic diseases. This course also prepares the student to best design and implement a plan of care for the patient with complex presentation.	

3 theory = 3 credits	Graduate Project	DPT 444
المتطلب السابق: Scientific Seminar HPT 435	In this course normal structural and functional basis of the scientific research are presented and discussed. Terminology of the hypotheses is also included. This is followed by discussions and practical demonstration of general and specific evaluation procedures and their rationales for use with patients suffering from particular functional problem. The student will be trained on how to determine methods of research, reliability measurements, informed consent and questionnaires	

1 theory + 1 Clinical = 2 credits	Elective Clinical Course	DPT 445
<p>المتطلب السابق:</p> <p>Advanced Clinical Neurology DPT 422</p> <p>Advanced Clinical pediatrics DPT 423</p> <p>Advanced Clinical Cardiopulmonary DPT 424</p>	<p>Explores the application of physiology of rest and exercise, principles of exercise testing and prescription for specific populations relevant to physiotherapy practice. Develops an understanding of the use of exercise as a means of health promotion, injury prevention and rehabilitation.</p> <p>In this course the student is permitted to select the area of practice of his own interest such as physical therapy for orthopaedic, neurology, paediatrics and cardiopulmonary disorders to go through deeper in this course.</p>	

2 Theory + 1 practical = 3 credits	Emergency life support techniques	HRS 114
<p>المتطلب السابق:</p> <p>Human Biology</p> <p>HFSB 101-1</p> <p>Biology for Health programs</p> <p>HFSB 102-1</p>	<p>The course is a 3 unit course of lectures and laboratory which develops the students knowledge on the basic concepts first aid and cardiorispiratory resuscitation. The student will also be learning how to assess emergency situations such as bleeding, fractures , wounds and shock. The student will also be learning how to prevent disease transmtion, and isolation concepts.</p> <p>To realize the general concepts and the basis of first aid and perform CPR effectively</p> <p>To deal with and manage common first aid emergencies. To deal with and manage common first aid emergencies.</p> <p>To assess the emergency situation and categorize the patients according to the periorities and degree of illness</p> <p>To communicate with the operator , colleagues and patients relatives effectively based on professional ethics and control protocols</p>	

2 Theory + 1 practical = 3 credits	Biostatistics	HRS 116
<p>المتطلب السابق:</p> <p>Human Biology</p> <p>HFSB 101-1</p>	<p>After the introductory course “Introduction to biostatistics”.The goal of this course is to learn advanced techniques in data analysis for quantitative and categorical variables. In this course, students will perform inference about means, correlation, regression and inference about proportion, using hand calculations and computational support (SPSS)</p> <p>Multiple linear regression</p> <p>Students will learn inference about mean</p> <p>Inference about a proportion</p> <p>Comparing independent means</p> <p>Comparing two proportions</p> <p>Comparing several means –ANOVA-</p> <p>Cross tabulated counts</p> <p>Correlation</p> <p>Stratified 2 by 2 tables</p> <p>Regression Multiple linear regression</p>	

1 theory + 1 Practical = 2 credits	Biomechanics Introduction to	HPT 212
<p>المتطلب السابق:</p> <p>Biology for Health programs</p> <p>HFSB 101-1</p>	<p>The purpose of this course is to Demonstrate the ability to conduct the proper evaluative procedure (s) to the patient. evaluate patients with musculoskeletal disorders, identify patient’s problems and implement the proper physical therapy modality and/ or technique according to biomechanical point of view. understanding of kinesiology allows for the development of a rational evaluation, a precise diagnosis, and an effective treatment of musculoskeletal disorders, and allows for safe, appropriate exercise prescription. Demonstrate judge wise in selecting the physical therapy modality .Master implementation of the physical therapy modality. Be Capable to design an assessment measure to test the effective of the treatment. Be able to practice as part of the health services team work within the standardized professional behavior. Practice with respect to the standards ethics of the institution and culture of the community.</p>	

1 theory = 1 credits	Introduction to physical therapy	HPT 213
<p>المتطلب السابق:</p> <p>Medical Terminology</p> <p>ENGL 207M</p>	<p>This course provides an explanation of the philosophy and history of the physical therapy profession and its relationship to other health care agencies and providers. This course provides a good idea about different physical therapy specialities with respect to examination and methods of treatment.</p>	

1 theory + 2 Practical = 3 credits	Test and Measurements (1)	HPT 214
<p>المتطلب السابق:</p> <p>Human Biology for Health programs</p> <p>HFSB 102-1</p>	<p>The purpose of this course is to appraise the importance and practical benefits of test and measurements .Demonstrate how to prepare environment, equipment and patient for evaluation procedures. Have the ability to conduct gross and individual muscle testing. Classify and identify different grades of muscle evaluation. Apply different techniques of muscle testing with respect to both therapist and patient mechanical advantage. Show professional behavior and attitude.</p>	

2 theory + 1 Practical = 3 credits	Human Anatomy	HPT 215
<p>المتطلب السابق:</p> <p>Human Biology for Health programs</p> <p>HFSB 102-1</p>	<p>The course introduces an overview that covers anatomical regions in greater depth. Topics include: the skeletal system, the muscular system, the articular system, the cardiovascular system, the integumentary system, the lymphatic system, the urinary system, the respiratory system, the digestive, the endocrine system, the reproductive system and the nervous system. More focus on joints and muscles of the upper and lower limbs (their origins, insertions, nerve supplies and actions).</p>	

2 theory + 1 Practical = 3 credits	Human Physiology	HPT 216
<p>المتطلب السابق:</p> <p>Human Biology for Health programs</p> <p>HFSB 102-1</p>	<p>This course is concerned with the study of the function of different body systems and its clinical applications in physical therapy. It includes the study of blood, circulation, respiration, regulation of water and electrolyte balance, digestion and absorption of food, musculoskeletal and nervous systems. It is also include the study of different pathological diseases that disturb. Normal physical function .activity</p>	

1 theory + 2 Practical = 3 credits	Electrotherapy	HPT 217
<p>المتطلب السابق:</p> <p>Biology for Health programs</p> <p>HFSB 101-1</p>	<p>This course is designed to review current concepts of electrotherapeutic modalities, identify the basic principles and procedures relating to some of the electrotherapy modalities, explain the physiological and therapeutic effects of the different electrotherapeutic modalities, discuss the advantages and disadvantages of the previous modalities, identify indications, contraindications, dangers and precautions of each techniques of applications and planning and managing the appropriate way of application for each modality.</p>	

1 theory + 2 Practical = 3 credits	Neuroanatomy	HPT 221
المتطلب السابق: Human Anatomy HPT 215	This course introduces the function of the nervous system including the spinal cord, cerebellum, peripheral nerves, the brain, midbrain, medulla oblongata, cerebral cortex and the somatic receptors.	

2 theory + 1 Practical = 3 credits	Neurophysiology	HPT 222
المتطلب السابق: Human Physiology HPT 216	This course introduces the function of the nervous system including the spinal cord, cerebellum, peripheral nerves, the brain, midbrain, medulla oblongata, cerebral cortex and the somatic receptors.	

2 theory + 1 Practical = 3 credits	Pathophysiology	HPT 223
المتطلب السابق: Human Physiology HPT 216	The course studies the biological processes that lead to a disease and other forms of diseases, and harmful distortions, and disabilities. The course also studies the functional changes that occur in cells and tissues and organs at the onset of disease.	

1 theory + 2 Practical = 3 credits	Test and Measurements (2)	HPT 224
<p>المتطلب السابق:</p> <p>Test and Measurements (1)</p> <p>HPT 214</p>	<p>The purpose of this course is to appraise the importance and practical benefits of test and measurements.</p> <p>Demonstrate how to prepare environment, equipment and patient for evaluation procedures. Have the ability to conduct gross and individual muscle testing. Classify and identify different grades of muscle evaluation. Apply different techniques of muscle testing with respect to both therapist and patient mechanical advantage. Show professional behavior and attitude .</p>	

1 theory + 2 Practical = 3 credits	Electrotherapy & Hydrotherapy	HPT 315
<p>المتطلب السابق:</p> <p>Electrotherapy</p> <p>HPT 217</p> <p>Physics for Health programs</p> <p>HFSP 101-1</p>	<p>This course identifies the basic principles and procedures relating to some of the thermal modalities, explain the physiological and therapeutic effects of the different thermal modalities, determine the advantages and disadvantages of the previous modalities, discuss indications, contraindications, dangers and precautions including techniques of applications to different methods and practice appropriate way of application for each modality</p> <ol style="list-style-type: none"> 1. List basics of Electrotherapy. 2. Record information about Heat modalities. 3. Outline principles about Electromagnetic radiation. <p>Enumerate indications, contra-indications, precautions and different techniques of each modality</p>	

2 theory = 3 credits	Clinical Pharmacology for Physiotherapist	HPT 316
<p>المتطلب السابق:</p> <p>Medical Terminology</p> <p>ENGL 207M</p>	<p>The course includes the basic general pharmacological principles. The clinical uses and physiological effect of drug in body systems; the common drugs, its effects, side-effects and dose used for the patients that can be indicated in treatment of cardiovascular, respiratory and nervous systems.</p>	

2 theory + 1 Clinical = 3 credits	Physical Therapy for Burn and Surgery	HPT 323
<p>المتطلب السابق:</p> <p>Human Physiology</p> <p>HPT 216</p> <p>Pathophysiology</p> <p>HPT 223</p>	<p>The course focuses in physiotherapy treatment of burned conditions and post-operative cases. Also it deals with the treatment of during, pre, and post-operative conditions</p>	

2 theory + 1 Practical = 3 credits	Physical Therapy for Neurological Disorders	HPT 324
<p>المتطلب السابق:</p> <p>Neurophysiology HPT 222</p> <p>Neuroanatomy HPT 221</p>	<p>Implementation of proper evaluation and treatment programs for neurological patients.</p> <p>Develop a clear understanding of the aetiology, pathology, prognosis and clinical feature of the most common neurological diseases affecting adult people.</p> <p>Apply the physical therapy evaluation and treatment approaches properly.</p> <p>Discuss and clinically differentiate neurological diseases.</p> <p>Utilize different evaluation methods to identify problem of various neurological diseases.</p> <p>Apply and demonstrate adequate practical skills to conduct the sensory, motor functional, and co ordination assessments.</p> <p>Demonstrate competence in handling and communicating with patients.</p>	

2 theory + 1 Practical = 3 credits	Pediatric Physical Therapy	HPT 325
<p>المتطلب السابق:</p> <p>Neurophysiology HPT 222</p> <p>Neuroanatomy HPT 221</p>	<p>The course provide the student with the different pediatric diseases and develop skills about the use of physiotherapy methods used in evaluation and treatment of different pediatric diseases. Also it concern with the creation of therapeutic programs used in treatment.</p>	

2 theory + 1 Clinical = 3 credits	Cardiopulmonary Physical therapy	HPT 331
<p>المتطلب السابق:</p> <p>Human Physiology</p> <p>HPT 216</p> <p>Pathophysiology</p> <p>HPT 223</p>	<p>The purpose of this course is to familiarize Physical Therapy students with basic knowledge in anatomy, physiology, common diseases/ conditions involving cardiovascular and pulmonary systems, as well as the various types of interventions for treatment. There will be an emphasis on providing appropriate physical therapy examination, evaluation, interventions, prognosis, and outcomes for patients with cardiopulmonary disease.</p>	

1 theory + 2 Practical = 3 credits	Therapeutic Exercise (1)	HPT 332
<p>المتطلب السابق:</p> <p>Human Anatomy</p> <p>HPT 215</p>	<p>The purpose of this course is to Identify the basic principles and procedures of exercise therapy, understand the physiological and therapeutic effects of the different types of exercise. List the advantages and disadvantages of the previous modalities. Identify indications, contraindications, dangers and precautions including techniques of applications. Planning and managing the appropriate way of application for each exercises. Demonstrate and acquire meaningful communications for instruction to the patient and ensure his/her comfort throughout the treatment. There will be an emphasis on providing appropriate physical therapy examination, evaluation, interventions, prognosis, and outcomes for different disorders.</p>	

1 theory + 2 Practical = 3 credits	Human Biomechanics	HPT 333
<p>المتطلب السابق:</p> <p>Human Anatomy</p> <p>HPT 215</p> <p>Introduction to Biomechanics</p> <p>HPT 212</p>	<p>The purpose of this course is to identify and evaluate the mechanical movement of the human body, mechanical analysis of the normal and abnormal human motion as well as an analysis of gait practice within the ethical and professional standards of the health institution. increase knowledge of the anatomy, physiology, and biomechanics. Has the knowledge of different types of movements. Demonstrate the ability to conduct the proper evaluative procedure (s) to the patient. Prioritize the patient's problem (s).</p>	

1 theory + 2 Practical = 3 credits	Psychosocial aspects of health and disease	HPT 334
<p>المتطلب السابق:</p> <p>Human Anatomy</p> <p>HPT 215</p> <p>Introduction to Biomechanics</p> <p>HPT 212</p>	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> - Introduce appropriate use of terminology associated with the field of Health and Disease. - Define the basic concepts of Health and Disease. - Discuss how selected behavior theories can be applied to promote change - Describe the reasoning of any behavioral change - Describe the importance of perception related to acute and chronic illness of patients as well as their care givers - Identify the variables influencing personal perceptions and societal expectations related to disease and how to promote change of behavior - Recognize general emotional effects and reactions to illness - Recognize the individual difference toward emotional reaction to illness and factors influencing adherence with the treatment - Understand the psychosocial status of the patients and their available psychosocial support as well as to plan physical therapy accordingly. - Demonstrate and interpret various psychological test and inventories related to measure perception and quality of life of the patients <p>Acquire the essential core of up to date basic knowledge and skills of psychosocial aspects of health and disease in Physiotherapy equivalent to what is required from Physiotherapy graduate.</p>	

2 theory + 1 Practical = 3 credits	Therapeutic Exercise (2)	HPT 335
<p>المتطلب السابق:</p> <p>Therapeutic Exercise (1)</p> <p>HPT 332</p>	<p>The purpose of this course is to Define therapeutic exercise in physical therapy care.</p> <p>Understand basic principles, indications, and precautions to be considered when performing different forms of exercises. Applying on one of his/her colleagues the different types of movements and exercises used in muscle re-education for any parts of the body.</p> <p>Outline the basic approach to patient evaluation and therapeutic exercise program development</p> <p>Define perceptual motor skill and coordination and Monitor clinical responses to measurement and exercise training procedures to insure patient safety.</p>	

1 theory + 1 Practical = 3 credits	Musculoskeletal system Evaluation	HPT 411
<p>المتطلب السابق:</p> <p>Human Biomechanics</p> <p>HPT 333</p> <p>Human Anatomy</p> <p>HPT 215</p>	<p>The purpose of this course is to provide the student with the essential practical steps in the evaluation of a patient with musculoskeletal dysfunction. Practical examination skills for the bony and soft tissue palpation , measurement of joint motion, muscle strength, contractures balance and posture are demonstrated and practiced.</p>	

2 theory = 2 credits	Research in Physical Therapy (1)	HPT 412
<p>المتطلب السابق:</p> <p>Biostatistics</p> <p>HRS 116</p>	<p>In this course normal structural and functional basis of the scientific research are presented and discussed. Terminology of the hypotheses is also included. This is followed by discussions and practical demonstration of general and specific evaluation procedures and their rationales for use with patients suffering from particular functional problem. The student will be trained on how to determine methods of research, reliability measurements, informed consent and questionnaires.</p>	

1 theory + 1 Practical = 2 credits	Clinical neurology	HPT 413
<p>المتطلب السابق:</p> <p>Neuroanatomy</p> <p>HPT 221</p> <p>Neurophysiology</p> <p>HPT 222</p> <p>Physical Therapy for Neurological Disorders</p> <p>HPT 324</p>	<p>The course aims in applying modern clinical therapeutic physical therapy modalities in treatment of neurological diseases and its surgery. The principles and clinical therapeutic skills in treatment of patients in hospital</p>	

2 theory + 1 Practical = 3 credits	Traumatology	HPT 414
المتطلب السابق: HPT 215	This course is designed to give knowledge and explanation of trauma affecting the musculo- skeletal system and joint injuries. The course also covers the types of fractures and dislocation, and the treatment methods.	

1 theory + 1 Practical + 1 clinical = 3 credits	Clinical practice in Pediatrics	HPT 415
المتطلب السابق: Human Anatomy HPT 215	The course aims in applying modern clinical therapeutic physical therapy modalities in treatment of pediatric patients and its surgery. The principles and clinical therapeutic skills in treatment of patients with different developmental disorders; Cerebral palsy, high risk infants ,prematurity, Genetic disorders, autism, brachial plexus lesions, myopathies, peripheral neuropathies, facial nerve lesions, osteogenesis imperfect and congenital orthopedic disorders in children as well as other pediatric patients in hospital.	

2 theory + 1 Practical = 3 credits	Diagnostic Imaging for Physiotherapist	HPT 416
المتطلب السابق: Physics for Health programs HFSP 101-1	This course builds on the student's knowledge in radiology, particularly as it applies to the neuro-musculo-skeletal system. The student will be able to explore normal and pathological findings as displayed by a variety of imaging modalities including x-ray, CT scans, MRI and US imaging. They will also have a better appreciation of when to use imaging, which imaging modality to use and when onward referral to another clinician may be more appropriate.	

1 theory + 1 Practical = 2 credits	Prosthetics and Orthotics	HPT 417
<p>المتطلب السابق:</p> <p>Human Anatomy</p> <p>HPT 215</p> <p>Therapeutic Exercise (2)</p> <p>HPT 333</p>	<p>The course focuses on understanding of the Prosthetics and orthotics and its clinical use. The course covers how to prescribe, fitting and train patient to apply them. The use of different materials used in fabrication of orthotics and artificial limbs.</p>	

1 theory + 2 clinical = 3 credits	Physical Therapy for Orthopedics and Rheumatology	HPT 433
<p>المتطلب السابق:</p> <p>Muscloskeletal system Evaluation</p> <p>HPT 411</p> <p>Traumatology</p> <p>HPT 414</p>	<p>The course is designed to give an understanding of orthopedics, rheumatology and appropriate physiotherapy treatment. It develops the skills for clinical practice in treatment of orthopedic cases.</p>	

2 theory = 2 credits	Research in Physical Therapy (2)	HPT 434
<p>المتطلب السابق:</p> <p>Research in Physical Therapy (1)</p> <p>HPT 412</p>	<p>In this course normal structural and functional basis of the scientific research are presented and discussed. Terminology of the hypotheses is also included. This is followed by discussions and practical demonstration of general and specific evaluation procedures and their rationales for use with patients suffering from particular functional problem. The student will be trained on how to determine methods of research, reliability measurements, informed consent and questionnaires.</p>	

2 theory + 1 Practical = 3 credits	Occupational Therapy	HPT 435
<p>المتطلب السابق:</p> <p>Prosthetics and Orthotics</p> <p>HPT 417</p>	<p>The course aims at applying the principles of and therapeutic skills of occupational therapy. Students are acquainted with the commonalities between physical therapy and occupational therapy in order to identify types of patients who are in need of occupational therapy.</p>	

1 theory + 1 Clinical = 2 credits	Geriatric Rehabilitation	HPT 436
<p>المتطلب السابق:</p> <p>Human Anatomy HPT 215</p> <p>Human Physiology HPT 216</p>	<p>Provide the student with knowledge and skills in the field of obstetrics and gynecology. encourage students to deal with different cases of obstetrics and gynecology in the field of woman's health</p>	

1 theory + 1 Practical = 2 credits	Advanced PT Procedure	HPT 437
<p>المتطلب السابق:</p> <p>Introduction to physical therapy</p> <p>HPT 213</p>	<p>This course aims to provide students with fundamental skills and knowledge in the new advances in evaluation and treatment of patients with varying physical disabilities. Rehabilitation and proper evaluation concepts and selected procedures are discussed, along with the physiological and abnormal interpretation of findings. The course schedule is divided into three units: new advance in laboratory based physical evaluation, advanced evaluation of different body systems, and new physical therapy techniques used in rehabilitation. In this course the student will learn specific techniques in Pt for treatment of different cases e.g., Bobath technique, Maitland technique, Mulligan and Brunnstrom its principles and indication of application.</p>	

<p>1 theory + 1 Practical = 2 credits</p>	<p>Physical Therapy for women's health</p>	<p>HPT 451</p>
<p>المتطلب السابق: Human Anatomy HPT 215</p>	<p>Provide the student with knowledge and skills in the field of obstetrics and gynecology. Encourage students to deal with different cases of obstetrics and gynecology in the field of woman's health</p>	

<p>2 theory = 2 credits</p>	<p>Management & organization in PT</p>	<p>HPT 452</p>
<p>المتطلب السابق: Introduction to physical therapy HPT 213</p>	<p>This course introduces the students to business communication, departmental design specifications, record keeping, equipment purchasing, report writing, policy and procedure manuals, supervision and evaluation of staff</p>	