

## Course Description of Allied Medical Sciences

**Pathology:** 12012115  
3CH

### **Course Description**

This course contains introduction to general and basic knowledge of diseases, their causes, pathogenesis, general morphological and changes at gross, microscopic and submicroscopic levels as well as the prognosis of the disease.

**Psychology for Rehabilitation students:** 12012216  
2CH

### **Course Description**

This course presents an introduction to psychology and deals with mental and psychological diseases with a focus on the impact of injuries and disabilities on the psychological and social situation of patients and the role of the natural therapist in improving the mental state of the injured.

**Medical Rehabilitation Ethics** 12011218  
1CH

### **Course Description**

Principles of medical ethics: Patient's rights (i.e., respect, privacy, integrity, & autonomy in making decisions; Patient's safety: Patient's protection act; Legal responsibility of physiotherapist for their action in professional context and understanding liability and obligations in case of medical legal action: Informed consent issues, confidentiality of patient's information; Legal issues: malpractice and negligence; Risk management; Infection control; Quality of services and Legal aspects: Enforcing standards in health professions to promote quality care; Rules of professional conduct: Relationship with patients, with colleagues, and with other professionals.

**General Medical Physics** 11021205  
3CH

### **Course Description**

This course will familiarize the students with the basic concepts and principles of mechanics (the motion of the objects ,laws of motion, work and energy), elasticity, and fluid dynamics. Describing the elasticity and general information about fluid dynamics, heat and temperature, waver (sound, electromagnetic).

## **General Biology**

**11011281**

**3CH**

### **Course Description**

Cell structure, cytology, cytology, cytology, cytology, cytology, cytology, cytology, molecular genetics, genetic code, multiplication and reproduction of genetic material, building proteins, inheritance of bacteria and viruses Living.

## **General Life Science Practical**

**11011282**

**1CH**

### **Course Description**

The material includes the study of cell structures, chemical components of the living cell and cellular activities (reproductive methods, enzymatic activities, physical properties, respiration and photosynthesis). The study also included the study of plant and animal tissues, the diversity of living organisms, and genetics.

## **Human anatomy:**

**12011211**

**3CH**

### **Course Description**

This course provides an theoretical introduction to general anatomy of the human body including anatomy of the skin, musculoskeletal system, nervous system, endocrine system, circulatory system, lymphatic system, respiratory system and urinary system.

## **Human anatomy Practical:**

**12011212**

**1CH**

### **Course Description**

This course provides practical anatomy of the human body including anatomy of the skin, musculoskeletal system, nervous system, endocrine system, circulatory system, lymphatic system, respiratory system and urinary system.

## **General Chemistry**

**11011107**

**3CH**

### **Course Description**

Chemical interactions, chemical calculations, gaseous states, thermal chemistry, electronic and periodic structure, chemical bonds, particle shapes, material states and the power of attraction between molecules, physical properties of solutions, principles of equilibrium.

**General Chemistry practical****11011108****1CH****Course Description**

The course aims at providing students with knowledge of basic laboratory techniques, determining the physical and chemical properties of the material, and how to determine the experimental formula between compounds.

**Physiology:****12011213****3CH****Course Description**

This course deals with the functions of the various body systems with some clinical applications related to the physiotherapy specialization, including study of the respiratory system, circulatory system, circulatory system, urinary system, gastrointestinal system, endocrine system, muscles and nervous system. Where natural functions.

**Physiology practical:****12011214****1CH****Course Description**

This course practical experience of functions of the various body systems with some clinical applications related to the physiotherapy specialization, including study of the respiratory system, circulatory system, circulatory system, urinary system, gastrointestinal system, endocrine system, muscles and nervous system. Where natural functions.

**Musculoskeletal Anatomy:****12012121****2CH****Course Description**

This course covers in greater depth skeletal system, the skeletal muscles system, and the articular system. The course will discuss all aspects of anatomical dimension, functional dimensions and neural supplement related to it.

**Musculoskeletal Anatomy practical:****12012122****1CH****Course Description**

This course provides a detailed explanation and practical application in the lab of the structural system, the musculoskeletal system and the articular system of the anatomical, functional aspects and the study of the nerves and blood vessels that feed this device.

## **Anatomy of the nervous system 12012131**

**3 CH**

### **Course Description**

The course includes the general layout of the nervous system, and a detailed study of anatomy of the brain and spinal cord, the ascending and descending tracts of the cord and the distribution of the cranial nerves, the vascular supply to the brain and the cerebrospinal fluid.

## **Introduction to Physical Therapy: 12012131**

**1CH**

### **Course Description**

This course introduces students to physical therapy, focusing on the role of physiotherapists in the prevention and treatment of disease, teaching, research, medical consultation and treatment of patients

## **Kinesiology: 12012123**

**2 CH**

### **Course Description**

This theory course includes basic concepts and terminology of Kinesiology, It deals with different types of forces, analysis the human body motion kinetic and kinematic. It is also include understanding gait analysis, and natural biomechanics of bone and soft tissue under normal and pathological conditions.

## **Kinesiology practical: 12012124**

**1CH**

### **Course Description**

This course practical application in the laboratory of basic concepts and terminology of motion science. And deals with different types of forces and analysis and applications on the human body. Uses of mechanics in physiotherapy. It also includes understanding walking analysis and natural biomechanics of bone and soft tissue under normal and pathological conditions.

## **Musculoskeletal Evaluation: 12012241**

**1CH**

### **Course Description**

A principal course in which the students are trained on methods of assessment of the musculoskeletal system from physiotherapy view. It includes the manual muscle testing for upper, lower extremities, trunk and neck muscles. Measurement of range of motion for body joints generally..

**Musculoskeletal Evaluation practical:**  
**1CH**

**12012242**

**Course Description**

A practical course in which the students are trained on methods of assessment of the musculoskeletal system from physiotherapy view. It includes the manual muscle testing for upper, lower extremities, trunk and neck muscles. Measurement of range of motion for body joints generally.

**Therapeutic exercise:**

**12012243**

**2CH**

**Course Description**

This course provide introduction for therapeutic exercises and methods of use and application in physical therapy, include the different types of passive and active movements, the types of muscle effort and ways of strengthening the muscle groups or individually, and flexibility exercises, in addition to the practical training of students to apply different types of exercises.

**Therapeutic exercise practical:**  
**1CH**

**12012244**

**Course Description**

This course introducing a practical information about therapeutic exercises and methods of use and application in physical therapy, include the different types of passive and active movements, the types of muscle effort and ways of strengthening the muscle groups or individually, and flexibility exercises, in addition to the practical training of students to apply different types of exercises.

**Electro-Therapy:**

**12013145**

**2CH**

**Course Description**

This course includes types of electrical currents used to raise electrical nerve, muscle and physiological effects and therapeutic uses in addition to the risks and preventive measures and students are trained on how to use electrical appliances. It also includes physiological effects of hydrotherapy, its uses, dangers, and preventive measures in addition to ways of using water treatment devices, students are trained in the use of these devices.

**Electro-Therapy practical:**  
**1CH**

**12013146**

**Course Description**

This course is a practical application for the types of electrical currents used to stimulate the nerves and muscles and its use as preventive measures. Students are required to practice on how to use therapeutic electrical appliances safely.

## **Musculoskeletal injuries and pathology 12012225**

**3CH**

### **Course Description**

This course introduce the musculoskeletal conditions that will be dealt with in physical therapy profession. These conditions range from congenital to acquired cases. We will go throw body sections and different joints, study evaluation, symptoms and specific test for special cases

## **Neurology Science:**

**12012232**

**3 CH**

### **Course Description**

This course introduces students to the neurosciences related to motor control and motor disorders. The course establishes and improves the principles of neurosciences for phusical therapy students. Those neurosciences principles will be related to further course such as physical therapy for neurological disorders.

## **Neurology Science practical:**

**12012233**

**1CH**

### **Course Description**

This course contains information on how to control the nervous system and a detailed description of the most common neurological diseases among adults, their development and clinical symptoms . it also focuses on acquiring and developing multiple methods for evaluation various neurological diseases.

## **Neuromuscular development 12012236**

**3 CH**

### **Course Description**

This course is designed to explore factors affecting motor and neural development across the life span as they relate to physiotherapy. Different theories regarding motor behavior will be explored from the fetal period through the years of adulthood.

## **Manual Therapy:**

**12013226**

**2CH**

### **Course Description**

This course provides theoretical approaches of manual therapy designed to teach students specific practical techniques to increase the level of joints movement of the upper and lower limbs, as well as increase the level of movement in the spine and maintain the level of normal movement in all joints of the body

**Manual Therapy practical: 12013227**  
**1CH**

**Course Description**

This course equipped students with a practice experience of the methods of manual therapy which designed to teach students specific practical techniques to increase the level of joints movement of the upper and lower limbs, as well as increase the level of movement in the spine and maintain the level of normal movement in all joints of the body

**Physical Therapy for Geriatric: 12013162**

**3H**

**Course Description**

This course provides a detailed information aging and physiological changes that occur in the human body during the age and focus on changes in the nervous system and circulatory system and musculoskeletal system and discusses the methods of evaluating the activity of the elderly and methods of physical therapy appropriate

**Orthotics & Prosthetics : 12013147**  
**3CH**

**Course Description**

This course presents a review of the role of prostheses in the rehabilitation of patient with motor disabilities and the identification of types of prostheses suitable for various diseases and types of better and appropriate limbs and compensatory devices and cooperation with the art of artificial limbs to reach the best results in the rehabilitation of the patients.

**Research Methods: 12013161**  
**3CH**

**Course Description**

This course is an introduction to the research methods in physiotherapy profession. Topics covered include: research design, hypothesis, Identify research problems and sampling procedures, literature review, and writing skills.

**Physical Therapy for Musculoskeletal Conditions: 12013228**  
**2CH**

**Course Description**

This course introduce the professional aspects of assessing and using the methods and means of physiotherapy for bone and muscular diseases, including fractures of various types, and focuses on spine disorders and joint diseases in the upper and lower limbs, including assessment and treatment methods.

**Physical Therapy for Musculoskeletal Conditions practical: 12013229**  
**1CH**

**Course Description**

This course provides practical experience in the laboratory to assess the cases and the use of methods and means of physical therapy for cases of bone and muscle diseases, including fractions of all types and focuses on diseases of the spine and joint diseases in the upper and lower limbs, including the means of assessment and treatment.

**Physical Therapy for neurological cases: 12014134**  
**2CH**

**Course Description**

The course includes clinical knowledge and skills are needed for physiotherapy evaluation and management of neurological disorders. The course allows students to independently evaluate, treat, and set long- and short-term goals for the patients with neurological impairments.

**Physical Therapy for neurological cases practical: 12014135**

**Course Description**

The course applies practically clinical knowledge and skills are needed for physiotherapy evaluation and management of neurological disorders. The

course allows students to independently evaluate, treat, and set long- and short-term goals for the patients with neurological impairments.

**Physical Therapy for cardiopulmonary system: 12014151**  
**3CH**

**Course Description**

This course will provide theoretical information in cardiopulmonary system and how it dealt with in physical therapy, it will include in depth cardiac and respiratory disease where the students will be required to understand physical therapy treatment protocols in different cardiovascular and respiratory problems.

**Physical Therapy for cardiopulmonary system practical: 12014152**  
**1CH**

**Course Description**

This course will provide practical information in cardiopulmonary system and how it dealt with in physical therapy, it will include in depth cardiac and respiratory disease where the students will be required to understand physical therapy treatment protocols in different cardiovascular and respiratory problems

**Physical Therapy for surgery and burn:**

**12014153**

**2 CH**

**Course Description**

The course focuses on theoretical aspects of physical therapy in cases of burns and surgery. It also includes a focus on physiotherapy in postoperative situations. It covers abdominal surgery, skin surgery, deep wound healing, bed ulcers, breast surgery and women's surgery, as well as burns,

**Physical Therapy for surgery and burn practical:**

**12014154**

**1 CH**

**Course Description**

This course focuses on the practical application of physical therapy in cases of burns and surgery. It is also focus on physiotherapy practice in postoperative situations. It covers abdominal and skin surgery, deep wound healing, bed ulcers, breast surgery and women's surgery, as well as burns.

**Principles of Diagnostic Radiology:**

**12013166**

**3CH**

**Course Description**

This course will introduce the basic information about X ray used for diagnosis and assessments of different ailment. It will inform students about the diagnostic X ray. Also it will help students to explore methods and types of x ray like US and CTS and MRI to th

**Pediatric Physical Therapy:**

**12013137**

**3CH**

**Course Description**

This course provides extensive information on pediatric diseases and focuses on diseases related to the nervous system, the musculoskeletal system, congenital diseases of birth, and methods of physiotherapy.

**Sports injuries**

**12013263**

**2 CH**

**Course Description**

This course introduces students to the natural treatment of sports injuries, bones and joints resulting from accidents outside and inside sports fields. It includes the identification of risk factors, first aid kits for sports injuries and fracture-related injuries, rehabilitation of these injuries and rehabilitation of the injured athlete, including examination, diagnosis, intervention and outcome

## **Sports injuries practical:**

**12013264**

**1CH**

### **Course Description**

This course offers a practical application to deal with sports injuries, bones and joints resulting from accidents outside and inside sports fields. Including the identification of risk factors, how to use first-aid kits for sports injuries and fracture-related accidents, rehabilitation of these injuries and rehabilitation of the injured athlete, including examination, diagnosis, intervention and outcome

## **Clinical Training 1&2**

**12014148& 12014249**

( 4 + 8 CH)

### **Course Description**

This is a clinical training period for students to acquire skills in assessment, treatment and patient management in all areas of physical therapy, It is divided into 2 periods. The first period is 4 credit hours, students must spend two full days a week in a clinical training center for 16 weeks, 8 hours a day.

The second period of 8 credit hours consists of working 8 hrs /4 days a week for 16 weeks. During this periods, students were supposed to practice under supervision of clinical instructors to acquire physiotherapy skills in cases of heart and lung disease, orthopedic surgery, neurology and pediatrics.

## **Symposium on Physiotherapy**

**12014268**

**1CH**

### **Course Description**

In this course, the student selects a clinical case as a research project. The student starts by conducting a literature review about the methods of evaluation and treatment in such cases. Finally, a presentation is to be made at the end of semester to colleagues in a seminar format.

## **Community Rehabilitation**

**12014165**

**3CH**

### **Course Description:**

This course introduces students to the basic principles of community Rehabilitation programs, medical qualification and teamwork. It highlights the role of each of the rehabilitation team member and its relation to the roles of other members. The course also focuses on the medical and research ethics of rehabilitation team members in clinics and hospitals.

## **Pharmacology**

**12014169**

**3CH**

### **Course Description:**

This article deals with the effect of different drugs on the human, and the knowledge of the effectiveness of the drug correctly and treated in a manner not affected the health of the patient.

## **Patient care principle:**

**12014217**

**3CH**

### **Course Description**

This course is to prepare the future therapist to interact with patients, families of patients and other relevant individuals at all levels. Taking into account the psychosocial conditions in the development of self-understanding and communication skills with patients, families, the public and other health teams.

## **Management in physical therapy services:**

**12014267**

**3CH**

### **Course Description**

The course is an introduction to the administration of hospitals and physiotherapy services. Topics covered include: departmental design, record, procedure manuals, scheduling of patients, recruiting, supervising and evaluating staff. The course also touches on the ethics of physical therapy