

B.Sc. in Physiotherapy Study Plan

■ University Compulsory Courses 16 C.H

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■ University Elective Courses 9 C.H

Pages (64 & 65)

■ Faculty Compulsory Courses 27 C.H

Line No.	Code	Course	
102181	MED218A	GROSS ANATOMY & HISTOLOGY	3
102182	MED218B	GROSS ANATOMY & HISTOLOGY (LAB)	0
102304	MED230A	HUMAN PHYSIOLOGY	3
102305	MED230B	HUMAN PHYSIOLOGY (LAB)	1
103021	MED302A	MEDICAL ETHICS	1
183111	PH311A	BIostatISTICS	2
911031	CHEM103A	GENERAL CHEMISTRY	3
911072	CHEM107B	GENERAL CHEMISTRY LAB	1
921031	PHY103A	GENERAL PHYSICS	3
931030	BIO103	GENERAL BIOLOGY	3
931070	BIO107	GENERAL BIOLOGY (PRACTICAL)	1
1114580	P.T458	MANAGEMENTS IN ALLIED MEDICAL SCIENCES	3
1731160	CS116	SELLECTED PROGRAMMING LANGUAGES (FOR NON COMPUTER SCIENCE INFORMATION STUDENTS)	3

■ Department Compulsory Courses 81 C.H

Line No.	Code	Course	
102121	MED212A	PATHOLOGY	3
102261	MED226A	NEUROSCIENCE (1)	3
102262	MED226B	NEUROSCIENCE 1 (LAB)	0
103260	MED326	NEUROSCIENCE (2)	3
1111020	P.T102	INTRODUCTION TO PHYSIOTHERAPY AND REHABILITATION SCIENCES	1
1112110	P.T211	MUSCULOSKELETAL ANATOMY	3
1112111	P.T211	MUSCULOSKELETAL ANATOMY LAB	0
1112230	P.T223	BIOMECHANICS	3
1112310	P.T231	EXERCISE PHYSIOLOGY	3
1112320	P.T232	KINESIOLOGY	3
1112321	P.T232	KINESIOLOGY (LAB)	0
1112410	P.T241	PHYSICAL MODALITIES	3
1112411	P.T241	PHYSICAL MODALITIES LAB	0
1112420	P.T242	INTRODUCTION TO CLINICAL MEDICINE	2
1112440	P.T244	THERAPEUTIC EXERCISE (1)	3
1112441	P.T244	THERAPEUTIC EXERCISE (1) (LAB)	0
1112500	P.T250	ELECTROTHERAPY	2
1112501	P.T250	ELECTROTHERAPY (LAB)	0
1112520	P.T252	DISEASES OF MUSCLES & BONE	2
1112530	P.T253	MUSCULOSKELETAL ASSESSMENT	3
1112531	P.T253	MUSCULOSKELETAL ASSESSMENT LAB	0
1113040	P.T304	MEDICAL IMAGING	2
1113410	P.T341	PT IN ORTHOPEDICS	3
1113411	P.T341	PT IN ORTHOPEDICS LAB	0
1113450	P.T345	THERAPEUTIC EXERCISE(2)	3
1113451	P.T345	THERAPEUTIC EXERCISE (2) LAB	0
1113460	P.T346	PT IN NEUROLOGY	3
1113461	P.T346	PT IN NEUROLOGY (LAB)	0

1113550	P.T355	PT IN SURGICAL CONDITIONS	2
1113590	P.T359	PT IN SPORTS INJURIES	2
1113600	P.T360	PT IN CARDIOPULMONARY CONDITIONS	3
1113601	P.T360	PT IN CARDIOPULMONARY CONDITIONS (LAB)	0
1113710	P.T371	INTRODUCTION TO CLINICAL PRACTICE	2
1113711	P.T371	INTRODUCTION TO CLINICAL PRACTICE LAB	0
1113720	P.T372	CLINICAL PRACTICE IN ORTHOPEDICS	2
1113721	P.T372	CLINICAL PRACTICE IN ORTHOPEDICS (LAB)	0
1113740	P.T374	PT IN PEDIATRICS	2
1114530	P.T453	PT IN GERIATRICS	2
1114550	P.T455	CLINICAL PRACTICE IN CARDIOPULMONARY	2
1114570	P.T457	PROSTHETICS AND ORTHOTICS	2
1114750	P.T475	CLINICAL PRACTICE IN BURNS AND RECONSTRUCTIVE SURGERY	2
1114790	P.T479	CLINICAL PRACTICE IN NEUROLOGY	2
1114800	P.T480	CLINICAL PRACTICE IN PEDIATRICS	2
1114801	P.T480	CLINICAL PRACTICE IN PEDIATRICS (LAB)	0
1114830	P.T483	PHARMACOLOGY	2
1114900	P.T490	ADVANCED CLINICAL PRACTICE	5
1114901	P.T490	ADVANCED CLINICAL PRACTICE (LAB)	0
1114930	P.T493	RESEARCH PROJECT	1

TOTAL 133 C.H

*** For prerequisite & equivalent courses see the Courses' Description.**

B.Sc. in Physiotherapy

Courses' Description

M 220 Functional Anatomy 3 C.H

This course begins with an introduction to the study of anatomy with particular reference to the musculoskeletal system. A detailed study of the gross anatomical structure and functional anatomy of the upper limb and lower limb will then be undertaken. This course will also examine the histological features of the musculoskeletal system tissues, and the tissue alterations associated with different activity states. (*Prerequisite: M 218*)

M 226 Neuroscience 1 3 C.H

The course covers basic neuroanatomy, neurophysiology, and neurohistology, focusing on processes involved in sensory and motor functions of the CNS. This knowledge will provide the foundations to understand the abnormal functional disorders and disabilities that may result from disease or trauma to the central nervous system. (*Prerequisite: M 230 a, and M 230 b*)

M 235 Functional Physiology and Biochemistry 3 C.H

This course includes principles of exercise physiology as they relate to various body systems. There is an emphasis on application of these principles when designing specialized exercise programs for effective patient care. (*Prerequisite: M 222, M 230a, and M 230b*)

M 302 Medical Ethics 1 C.H

This course provides the students with the fundamental comprehension of medical ethics to develop a conceptualized framework for moral judgment, and decision making to serve as a basis for health care practice. (*Prerequisite: none*)

M 326 Neuroscience 2 3 C.H

This course focuses on physiology of neuron, neurotransmitters, chemical changes and their roles in the diseases affecting the nervous system and body functions. Medical diagnosis of acute and chronic neurodiseases, and treatment of clinical cases in a medical setting. (*Prerequisite: M 226*)

PT 212 Biomechanics 3 C.H

This course includes principles of biomechanics as they relate to motions associated with human movements. Mechanical analysis of these movements will be presented. (*Prerequisite: Ph 103*)

PT 300 Computers in medical Sciences 2 C.H

The course is designed to develop an open framework of explaining and using of databases in health care organizations, especially in hospitals. The students will be taught the applications of various computer skills and tools to serve administrative tasks and to achieve management goals. Emphasis will be on using Microsoft Office tools and internet applications. (*Prerequisite: none*)

PT 301 Introduction to Physical Therapy 3 C.H

Students explore the fundamental knowledge, skills, and behaviors required in the Physical Therapy profession. Concepts and issues related to the meaning of being a health professional, code of ethics, models of care/classification, determinants of health, physical and

psycho-social themes, communication and documentation, movement analysis and evidence-based, decision-making process are addressed in the context of health promotion, acute and sub-acute care and rehabilitation. (*Prerequisite: none*)

PT 331 Kinesiology 3 C.H

Analysis of structure and function of bones, joints, muscles, and nerves and their individual and combined contribution to human movement. (*Prerequisite: PT 212*)

PT 332 Clinical Basis of Physical Therapy 4 C.H

This course addresses methods of assessment in physical therapy including muscle-testing, range of motion, postural, reflexes, preparation of treatment plan. (*Prerequisite: PT 301*)

PT 342 Introduction to Clinical Medicine 3 C.H

The aim of this course is to give the students general knowledge about common diseases. This includes the major symptoms, signs, laboratory investigations, diseases enteritis and their basic management. (*Prerequisite: M 212*)

PT 352 Diseases of Muscles and Bones 2 C.H

In this course the basic understanding of orthopedic diseases and their management with special attention to the role of rehabilitation in special diseases will be demonstrated. (*Prerequisite: M 212*)

PT 382 Therapeutic Procedures I 4 C.H

The study of physiological effects and clinical applications of thermal and cryo-agents, hydrotherapy, massage, as well as, principles and techniques of spinal traction are covered.

The goal of these who desire competence in this area of practice should be the ability to:

- Select modalities skillfully.
- Administer effective treatment.
- Adapt appropriately when necessary.
- Evaluate the results accurately.

(*Prerequisite PT 301*)

PT 442 Geriatric physical Therapy 2 C.H

This course addresses issues in human aging relevant to Physical Therapist. Theories relevant to physiological and psychological age-related changes are identified. Additionally, therapeutic assessments and interventions are discussed. (*Prerequisite: PT 352 and PT 382*)

PT 451 Cardiopulmonary Rehabilitation 2 C.H

This course includes basic understanding of the role of rehabilitation programs in the management of individuals with cardiovascular/pulmonary diseases, with special emphasis on the etiology and pathology of common cardiovascular/pulmonary disorders as well as the principles of designing specialized programs for effective patient care. Common laboratory and diagnostic tests for these disorders will also be discussed. (*Prerequisite: M 235*)

PT 452 Pediatric Physical Therapy 2 C.H

This course provides in-depth demonstration of the assessment and intervention procedures used with children. The course focuses on the normal and abnormal physical and motor development, common pediatric conditions, assessment, rating scales, therapeutic approaches and techniques, as well as adaptive equipments and devices. (*Prerequisite: PT 352& PT 382*)

PT 458 Management in Allied Health Sciences**3 C.H**

A course designed to provide on-site rotations with AHS administrative directors, instruction in budget preparation, personnel considerations, equipment purchasing and related maintenance, departmental design, and other duties and responsibilities of all types of AHS administrators. (*Prerequisite: none*)

PT 461 Electrotherapy**2 C.H**

This course focuses on the electrotherapy assessment, diagnosis and intervention skills for individuals with spinal conditions and chronic musculoskeletal conditions. Students also acquire competencies in applications of various electrotherapy modalities. (*Prerequisite: PT 352 and PT 382*)

PT 462 Sport Injuries**2 C.H**

This course address the injuries that occur as a result of physical activities carried out either for general recreational purposes or with more professional goals in mind. In this course, the students acquire the skills in physical therapy assessment and intervention for individual with such injuries. (*Prerequisite: PT 352 and PT 382*)

PT 471 Clinics in Physical Therapy I**5C.H**

This course provides in-depth exploration of the assessment and intervention procedures used with clients suffering from various neurological pathologies. This course focuses on neurological problems acquired in adulthood. The student will apply knowledge of basic anatomy, physiology and pathology of the human nervous system to evaluation and treatment programs for patients with neurological dysfunction. (*Prerequisite: PT 382*)

PT 472 Clinics in Physical Therapy II**5C.H**

Students practice in selected clinical facilities to integrate knowledge, skills, and professional behaviors into clinical practice with clients of all ages with neurological conditions, spinal conditions or chronic conditions of the musculoskeletal system including arthritic conditions and chronic pain. (*Prerequisite: PT 471*)

PT 481 Therapeutic Procedures II**5C.H**

This course covers the basic principles and related terminology of therapeutic exercise techniques used in rehabilitation. (*Prerequisite: PT 382 and PT 235*)

PT 482 Pharmaceutical Therapeutics**2 C.H**

This course provides the student with the basic knowledge of clinical pharmacology in order to understand the clinical importance of drugs in Physical Therapy. (*Prerequisite: PT 230 a and PT 230 b*)

PT 491 Seminar**1 C.H**

This course is designed to present the basics of research methodology including experimental design, human research, and critical analysis of medical literature. The student will develop a research project with the consultation of a faculty member. The student, with guidance from a faculty member, will utilize readings, texts, journal articles, practicum experience, or attendance at seminars or lectures, to identify and explore selected subject matter. (*Prerequisite: none*)