



# **Bachelor of Science in Physiotherapy Study Plan and Course Descriptions**

**Ref: UC/ P725/2024**

**As approved by University Council Decision No. UC/2563/14/2023-24 of meeting No. UC/14/2023-24 held on Wednesday the 24<sup>th</sup> of July 2024. Effective From NQF Placement (Target First Semester 2024-2025)**

**Ahlia University**  
**COLLEGE OF MEDICAL & HEALTH SCIENCES**  
**BACHELOR OF SCIENCE IN PHYSIOTHERAPY**  
**BSPT 24-25**

**BSPT 24-25 - FIRST YEAR (41 CREDITS)**

**First Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
ARAB	101	Composition for Native Speakers of Arabic I	3	0	3	
HIST	121	Modern History of Bahrain	3	0	3	
ENGL	101	Academic English I	3	0	3	
ANAT	101	General Anatomy I	2	2	3	
MATH	101	Calculus I	3	0	3	
CHEM	101	General Chemistry for Health Sciences	3	0	3	
					<b>18</b>	

**Second Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
ENGL	102	Academic English II	3	0	3	ENGL 101
ITCS	101	Introduction to Computers & IT	2	2	3	
MATH	102	Calculus II	3	0	3	MATH 101
ANAT	121	General Anatomy II	2	2	3	ANAT 101
STAT	101	Introduction to Statistics	3	0	3	
PHYS	101	General Physics I	3	0	3	
					<b>18</b>	

**Summer Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
HUMR	101	Principles of Human Rights	2	0	2	
HU/SS	XXX	Humanities/Social Sciences	3	0	3	
					<b>5</b>	

**BSPT 24-25 - SECOND YEAR (38 CREDITS)**

**First Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
ENGL	211	English for Health Sciences I	3	0	3	ENGL 102
PHYG	211	General Physiology	2	2	3	ANAT 121
PHTH	215	Musculoskeletal Anatomy	3	2	4	ANAT 121
PHTH	216	Psychological Aspects of Disability	3	0	3	ANAT 121 AND ENGL 102
CHEM	214	Biochemistry	3	0	3	CHEM 101 AND ANAT 121
XXXX	XXX	Free Elective	X	X	3	
					<b>19</b>	

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**Second Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
PHTH	227	Biomechanics	2	2	3	PHTH 215
PHTH	222	Neuroanatomy & Physiology	2	2	3	PHYG 211 AND PHTH 215
PHTH	223	Introduction to Radiology & Pathology	2	2	3	PHYG 211 AND PHTH 215
PHTH	224	Principles of Electrotherapy	2	2	3	PHYS 101 AND PHYG 211 AND PHTH 215
PHTH	228	Introduction to Exercise Physiology	2	0	2	PHYG 211 AND PHTH 215
PHTH	229	Basic Clinical Practice	0	10	5	PHYG 211 AND PHTH 215
					<b>19</b>	

**BSPT 24-25 - THIRD YEAR (38 CREDITS)**

**First Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
ENGL	212	English for Health Sciences II	3	0	3	ENGL 211 AND Completion of at least 3 credits
PHTH	312	Orthopedic, Sports & Rheumatology Physiotherapy	2	2	3	PHTH 227 AND PHTH 223 AND PHTH 229
PHTH	318	Manual Therapy	2	2	3	PHTH 227 AND PHTH 223 AND PHTH 229
PHTH	314	Principles of Therapeutic Exercise	2	2	3	PHTH 228 AND PHTH 227 AND PHTH 229
PHTH	315	Clinical: Orthopedic Medicine & Surgery	2	2	3	PHTH 227 AND PHTH 223 AND PHTH 229
PHTH	316	Clinical: Orthopedic, Sports & Rheumatology Physiotherapy	0	8	4	PHTH 227 AND PHTH 223 AND PHTH 229
					<b>19</b>	

**Second Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
PHTH	321	Theories of Cardiopulmonary Physiotherapy	2	2	3	PHTH 223 AND PHTH 229
PHTH	322	Medical Physiotherapy	3	0	3	PHTH 229
PHTH	323	Clinical: Cardiopulmonary Medicine & Surgery	2	2	3	PHTH 223 AND PHTH 229
PHTH	324	Clinical: Cardiopulmonary & Medical Physiotherapy	0	8	4	PHTH 223 AND PHTH 229
PHTH	325	Organization & Ethics in Physiotherapy	3	0	3	PHTH 216
STAT	201	Medical Statistics	3	0	3	STAT 101
					<b>19</b>	

**BSPT 24-25 - FOURTH YEAR (38 CREDITS)**

**First Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
PHTH	412	Theories of Neurological Physiotherapy	2	2	3	PHTH 222 AND PHTH 223 AND PHTH 229
PHTH	413	Clinical: Neurological Medicine & Surgery	2	2	3	PHTH 222 AND PHTH 223 AND PHTH 229
PHTH	414	Clinical: Neurological Physiotherapy	0	8	4	PHTH 222 AND PHTH 223 AND PHTH 229
PHTH	415	Introduction to Pharmacology	3	0	3	CHEM 214
HCRM	498	Research Methodology in Health Sciences	3	0	3	STAT 201 AND PHTH 325 AND Completion of at least 90 credits
XXXX	XXX	Major Elective	X	X	3	
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**Second Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
PHTH	499	Major Project	0	6	3	HCRM 498 AND Completion of at least 90 credits
PHTH	421	Clinical: Pediatric Physiotherapy	0	8	4	PHTH 222 AND PHTH 223 AND PHTH 229
PHTH	422	Theories of Pediatric Physiotherapy	2	2	3	PHTH 222 AND PHTH 223 AND PHTH 229
PHTH	423	Clinical: Pediatric Medicine & Surgery	2	2	3	PHTH 222 AND PHTH 223 AND PHTH 229
PHTH	424	Clinical: Community Physiotherapy	0	6	3	PHTH 315 AND PHTH 323
PHTH	425	Occupational Health & Ergonomics in Physiotherapy	2	2	3	PHTH 314
					<b>19</b>	

**LIST OF MAJOR ELECTIVE COURSES**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
PHTH	426	Community Well-being and Public Health	3	0	3	
PHTH	427	Human Physical Growth and Development	3	0	3	
PHTH	428	Sports Injuries	3	0	3	
PHTH	429	Women's Health	3	0	3	

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**BSPT 24-25 - FIRST YEAR (41 CREDITS)**

**First Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
ARAB	101	Composition for Native Speakers of Arabic I	3	0	3	
A practical language course which aims at developing the students' skills in analyzing literary texts as well as their skills in utilizing Arabic grammar in writing short texts. The course focuses on skills such as journalistic writing and letter writing and pays special attention to development of personal style.						
HIST	121	Modern History of Bahrain	3	0	3	
This course focuses on the importance of the strategic location of the Kingdom of Bahrain; Bahrain history since the early 1600; Al-Utoobs and the rise of Zubara; the beginning of Al-Khalifa era; Bahrain under the British protection & independence and the building of the modern state; modernization of the political administrative and legal systems; economic and social development in Bahrain.						
ENGL	101	Academic English I	3	0	3	
A course to develop the students' ability to use the language in business-related situations. It offers practices in reading comprehension, grammar, vocabulary-building and writing a single paragraph on themes related to business management, banking and information technology.						
ANAT	101	General Anatomy I	2	2	3	
This course introduces generalized knowledge pertaining to structure of the human body on a system basis. The course integrates concepts of anatomical terms and references of motion, gross anatomy of human body and few body systems including Skeletal system, Cardiovascular system, Respiratory system etc. Teaching is supplemented with practical laboratory classes. This course provides a progression pathway for General Anatomy II.						
MATH	101	Calculus I	3	0	3	
Math 101 is calculus I, which is a university requirement for the BSc program in Engineering, IT, Multimedia, and Physiotherapy. This course covers limits and continuity, and differentiation of algebraic and transcendental functions with different rules, which involve multiplication, division, and chain rules. Applications of differentiation such as extrema (maxima and minima), optimization, and mean value theorem are also covered in this course. Assignments of various problems are handed to the students to solve to prepare them for the exams.						
CHEM	101	General Chemistry for Health Sciences	3	0	3	
This course will provide generalized knowledge of atomic structure, chemical formulas and chemical equations and to prepare the learners with the foundations of life chemical processes. The learners will be equipped with generalized knowledge about the basic principles, fundamental concepts and unique mechanistic steps involved in chemical and biochemical reactions. This course will provide progression pathways for biochemistry and introduction to pharmacology.						
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**Second Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
ENGL	102	Academic English II	3	0	3	ENGL 101
A continuation of ENGL 101 which further develops students' skills in reading and writing based on business-related topics.						
ITCS	101	Introduction to Computers & IT	2	2	3	
This course is an introduction to computer and information technology. It introduces computers (their uses, development, components, hardware and software) to the students and to teach them how to use MS Office.						
MATH	102	Calculus II	3	0	3	MATH 101
Math 102 (Calculus II) is an university requirement for the BSc program in Engineering, IT, Multimedia, and Physiotherapy. This course is a continuation of Calculus I program with emphasis on integration methods and techniques followed by further integration and applications. Taylor and Maclaurin theorems, power series, infinite series and polar coordinates are all covered in this course. Assignments are also handed to the learners to solve and get prepared for the exam.						
ANAT	121	General Anatomy II	2	2	3	ANAT 101
This course introduces detailed knowledge related to the structure of the human body on a system basis. Musculoskeletal, cardiopulmonary, neurological digestive and endocrine systems will be discussed in detail. Teaching is supplemented with practical laboratory demonstrations and supervised practice. This course provides some physiological knowledge will be introduced as Metabolism and Nutrition & Gas transport system and exchange. The course will provide progression pathways for courses related to general physiology and musculoskeletal anatomy & physiology.						
STAT	101	Introduction to Statistics	3	0	3	
is an elementary course that begins by familiarizing the student with new concepts as applied to extraction of meaningful information from random sets of data. It covers descriptive statistics and leads on to frequency and its distribution, variance and standard deviation, probability, expected values, discrete and continuous probability distributions, correlation and regression.						
PHYS	101	General Physics I	3	0	3	
This course covers units and measurements, vectors, Newton's laws of motion, projectile motion, work and energy, impulse and momentum, rotational dynamics, equilibrium of a rigid body and periodic motion.						
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**Summer Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
HUMR	101	Principles of Human Rights	2	0	2	
The course covers the basic principles of human rights through the definition of human rights and their scope with a focus on International Conventions of Human Rights, which includes the following documents: United Nations Charter, Universal Declaration of Human Rights, International Convention for Civil and Political Rights, International Convention for Economic, Social and Cultural Rights and Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. It also covers protection mechanism and institutional administration of rights and general freedoms in the Kingdom of Bahrain.						
HU/SS	XXX	Humanities/Social Sciences	3	0	3	
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**BSPT 24-25 - SECOND YEAR (38 CREDITS)**

**First Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
ENGL	211	English for Health Sciences I	3	0	3	ENGL 102
The first in the series of integrated language courses, which develops and improves students' reading skills in English, whilst increasing medical vocabulary through selected readings based on physiotherapy-related topics.						
PHYG	211	General Physiology	2	2	3	ANAT 121
This course provides a detailed knowledge related to the normal function of body structures is taught on system basis. The course includes the function of different cells, tissues, organ, and systems including functions of immune system and defense mechanisms, blood circulation, neurophysiology. The course includes measurement of physiological parameters including heart rate, blood pressure etc. in a lab setting. This course provides progression pathways for courses related to neuroanatomy and physiology as well as radiology and pathology.						
PTHH	215	Musculoskeletal Anatomy	3	2	4	ANAT 121
This course provides detailed knowledge related to anatomy and physiology of joints, ligaments, capsules, articular cartilages, nerves, muscles, and tendons. This will include overview of general tissue structure followed by regional functional musculoskeletal anatomy. Teaching is supplemented with practical laboratory classes.						
PTHH	216	Psychological Aspects of Disability	3	0	3	ANAT 121 AND ENGL 102
The course provides detailed knowledge to social and psychological aspects of disease and disability. Topics include personality, mood disorders, mental disorders including schizophrenia as well as motivation, denial and acceptance of phases of disability.						
CHEM	214	Biochemistry	3	0	3	CHEM 101 AND ANAT 121
The course focuses providing detailed knowledge related to the chemical and physical principles of living things and of biological processes. Topics will include the energetics of metabolism; the structure and metabolism of proteins, carbohydrates, as well as lipids; and the integration of metabolic systems. Additionally, the chemistry of nitrogenous bases and how protein synthesis is accomplished on the cellular level is discussed. This course provides a progression pathway to introduction to pharmacology.						
XXXX	XXX	Free Elective	X	X	3	
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**Second Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
PHTH	227	Biomechanics	2	2	3	PHTH 215
This course provides detailed knowledge and understanding related to the application of laws of physics on human body movements. The course includes description of static and dynamic laws on human motion, levers and types of forces acting on human joints, mechanics of therapeutic exercises, abnormal force application and injury mechanism, forces, momentums, action-reaction theories, friction, and normal and dysfunctional posture, gait, and activities of daily living. This course provides a progression pathways for clinical courses related to orthopedic, sports, rheumatology physiotherapy.						
PHTH	222	Neuroanatomy & Physiology	2	2	3	PHYG 211 AND PHTH 215
This course provides detailed knowledge and understanding related to the neurophysiologic and neuroanatomic basis of human body movement, function and motor control of the musculoskeletal system. This includes topics in neurophysiology, neural transmission, mechanism, cerebral functions and control, pyramidal and extra-pyramidal function, peripheral nerve functions and neuromuscular transmission, and other related topics. This course provides a progression pathway related to clinical courses.						
PHTH	223	Introduction to Radiology & Pathology	2	2	3	PHYG 211 AND PHTH 215
This course introduces pathology with emphasis on cellular adaptations and tissue/cellular reaction to inflammation, injury, degenerative processes, and tissue repair. Building on this knowledge, the course then focuses on the basics of interpreting and utilizing common laboratory results and radiological findings in relation to physiotherapy practice. Teaching is supplemented with practical laboratory classes. This course provides progression pathway to clinical courses related to orthopedic medicine and surgery, sports and rheumatology physiotherapy etc.						
PHTH	224	Principles of Electrotherapy	2	2	3	PHYS 101 AND PHYG 211 AND PHTH 215
The principles of electrotherapy modalities including Ultrasound, Diathermy, Therapeutic uses of electric currents, and Laser are discussed in this course. The principles of the modalities along with the physiological effects and interaction of the electrical and non-electrical sources of energy pertaining to different human body tissue is discussed. The principles, methods, of administering different electrotherapy modalities are included with their indication, effects and contra-indications.						
PHTH	228	Introduction to Exercise Physiology	2	0	2	PHYG 211 AND PHTH 215
The course provides detailed knowledge and describes the series of physiological functions, reactions and biochemical principles involved in creation, maintenance, and malfunction of human movements. Topics included are physical fitness and health, physiological responses to exercises, the physiological basis of training and fitness assessment. This course provides a progression path for courses related to principle for therapeutic exercise.						
PHTH	229	Basic Clinical Practice	0	10	5	PHYG 211 AND PHTH 215
The course deals with the application of theoretical knowledge history taking, physiotherapy assessment and evaluation, problem identification, patient goal setting, and physiotherapy management formulation relevant to the different clinical areas of physiotherapy with opportunities to engage in actual clinical exposure in the hospital with simulated sessions on relevant practices of physiotherapy clinical practice.						
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**BSPT 24-25 - THIRD YEAR (38 CREDITS)**

**First Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
ENGL	212	English for Health Sciences II	3	0	3	ENGL 211 AND Completion of at least 3 credits
The second in the series of integrated language courses, which further develops and improves students' reading skills in English, whilst increasing medical vocabulary through extensive readings based on health- related topics.						
PHTH	312	Orthopedic, Sports & Rheumatology Physiotherapy	2	2	3	PHTH 227 AND PHTH 223 AND PHTH 229
This course provides advance knowledge related to principles of physiotherapy for musculoskeletal, sports and rheumatological diseases and injuries are taught. Joints and bone diseases are presented in systemic approach followed by physiotherapy assessment, indications, and contra-indications of physiotherapy treatment. Pre- and post-operative physiotherapy procedures are discussed for selected orthopedic surgical cases. Practical training in assessment techniques, gait training, muscle testing are included.						
PHTH	318	Manual Therapy	2	2	3	PHTH 227 AND PHTH 223 AND PHTH 229
This course includes advance knowledge related to anatomical, biomechanical, and physiological basis of orthopedic manipulative procedures. This includes indications, contra-indications, physiological and therapeutic effects of the common manipulative procedures in a systematic approach. The course will also include introduction in mobilization theory, upper extremities techniques, lower extremities, cervical spine, thoracic spine techniques, lumbar and sacroiliac mobilization, and orientation in common schools of thought in this field. Teaching is supplemented with practical skills training in the laboratory setting.						
PHTH	314	Principles of Therapeutic Exercise	2	2	3	PHTH 228 AND PHTH 227 AND PHTH 229
This course is designed to teach the students on the basic principles of therapeutic exercise. Emphasis is given on assessment and treatment protocols in the different fields of therapeutic exercise particularly range of motion, progressive resistive, stretching, peripheral joint mobilization exercise, McKenzie techniques, nags and snags, The course also focus on the principles of soft tissue healing and the protocols that are necessary for proper therapeutic exercises. The course is reinforcing with practical components.						
PHTH	315	Clinical: Orthopedic Medicine & Surgery	2	2	3	PHTH 227 AND PHTH 223 AND PHTH 229
This course provides advance knowledge and understanding related to common orthopedic diseases and injuries are included in this course. The main topics are fracture types and complications, fractures closed and open reduction techniques, joint arthritis classification and diagnosis, systemic inflammatory diseases, auto-immune disorders affecting bones and joints, peripheral nerve injury types and management, total joint replacement, congenital musculoskeletal diseases, soft tissue and sports injuries and other related topics. The course is reinforced with clinical rounds with orthopaedic consultants and senior physiotherapists. This course provides a progression pathway for clinical courses related to Orthopaedic, sports and rheumatology physiotherapy.						
PHTH	316	Clinical: Orthopedic, Sports & Rheumatology Physiotherapy	0	8	4	PHTH 227 AND PHTH 223 AND PHTH 229
This practical skills course covers advance level of knowledge and applied knowledge related to physiotherapy assessment, management and documentation of common musculoskeletal, sports and rheumatologic conditions in a supervised clinical setting.						
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**Second Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
PHTH	321	Theories of Cardiopulmonary Physiotherapy	2	2	3	PHTH 223 AND PHTH 229
The course introduces critical knowledge and understanding pertaining to principles of physiotherapy assessment and treatment for common cardiac and pulmonary conditions. Respiratory and cardiac conditions are presented in systematic approach followed by assessment, indications, and contraindications of physiotherapy management. Pre and post-operative physiotherapy procedures are discussed for cardio-pulmonary surgical cases. Physiotherapy assessment techniques, postural drainage, Intensive Care Unit care, COPD rehabilitation and post-operative cardiac rehab are included. Teaching is supplemented with practical skills training in the laboratory setting.						
PHTH	322	Medical Physiotherapy	3	0	3	PHTH 229
This course provides advance knowledge and understanding related to general medical and surgical conditions encountered in physiotherapy practice medical conditions such as burns, amputation, cancers, lymphedema, gynaecologic & obstetric issues and chronic pain are discussed. Medical, surgical and physiotherapy management are discussed.						
PHTH	323	Clinical: Cardiopulmonary Medicine & Surgery	2	2	3	PHTH 223 AND PHTH 229
The course provides advance knowledge and understanding related to cardiac and pulmonary conditions commonly encountered in physiotherapy with a discussion on etiology, pathomechanics and pathophysiology, clinical presentation, medical and surgical management, as well as prognosis. Teaching is supplemented with clinical visits.						
PHTH	324	Clinical: Cardiopulmonary & Medical Physiotherapy	0	8	4	PHTH 223 AND PHTH 229
This course provides advance knowledge and practical application of cardiopulmonary and medical physiotherapy principles in a supervised clinical setting. The purpose of the course is that the learners equipped with techniques and be competent in cardio-pulmonary rehabilitation, burns, kidney care patients and amputation. Topics of the course includes post-operative cardio-pulmonary rehabilitation, ischemic heart disease physiotherapy, postural drainage techniques, COPD rehabilitation, ICU patient management, respiratory exercise techniques and applications and related topics in cardio-pulmonary rehabilitation, medical condition and post-operative surgical patients.						
PHTH	325	Organization & Ethics in Physiotherapy	3	0	3	PHTH 216
This course provides advance level of knowledge and understanding related to health care planning, delivery system and ethical issues in the field of physiotherapy. The main topics in the course are professionalism, accountability, patient-therapist relationship challenges, patient rights, medicolegal aspects of health care, malpractice issues, Professional standards, Code of Ethics, Standards of Practice in Physiotherapy profession and other related topics.						
STAT	201	Medical Statistics	3	0	3	STAT 101
starts with an application of elementary statistics to basic principles and methods of epidemiology and then moves to more sophisticated analysis encompassed in medical statistics. The emphasis will be on the design and interpretation of epidemiological studies. Appropriate statistical methods will be integrated with the main epidemiological content, and practical sessions will make use of relevant computer software.						
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**BSPT 24-25 - FOURTH YEAR (38 CREDITS)**

**First Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
PTHH	412	Theories of Neurological Physiotherapy	2	2	3	PTHH 222 AND PTHH 223 AND PTHH 229
The course provides learners with critical knowledge and principles of physiotherapy for neurological diseases and injuries. The topics include a review of basic concepts in neuroanatomy relevant to the neurological sciences. Discussions of the basic principles in the rehabilitation management of commonly encountered neurological conditions are presented. Pre- and post-operative physiotherapy procedures for neurosurgical cases are discussed. Teaching is supplemented with practical skills training in the laboratory setting.						
PTHH	413	Clinical: Neurological Medicine & Surgery	2	2	3	PTHH 222 AND PTHH 223 AND PTHH 229
This course will provide critical knowledge and understanding of different neurological diseases and their related medical and surgical management will be discussed in this course. Students will be trained on proper neurological assessment and differential diagnosis. Conditions including central and peripheral nerve system diseases, spinal cord diseases and injuries, traumatic head injury, common neurosurgical procedures are discussed. Teaching is supplemented with clinical visits.						
PTHH	414	Clinical: Neurological Physiotherapy	0	8	4	PTHH 222 AND PTHH 223 AND PTHH 229
This course provides a specialized applied knowledge and practical exposure in clinical settings which aims to train students in neurological physiotherapy assessment and treatment skills. The training includes providing physiotherapy techniques for patients with conditions including central and peripheral nerve system diseases, spinal cord diseases and injuries, traumatic head injury and common neurosurgical procedures are discussed.						
PTHH	415	Introduction to Pharmacology	3	0	3	CHEM 214
This course provides detailed knowledge related to pharmacology aims to introduce students to pharmaceutical agents used in common diseases. The course includes an introduction to basics of drugs used for therapeutic purposes, major drug groups, actions, and precautions of NSAID, central muscle relaxants, beta-blocker indications, analgesics and other related topics.						
HCRM	498	Research Methodology in Health Sciences	3	0	3	STAT 201 AND PTHH 325 AND Completion of at least 90 credits
This course equips students with critical knowledge and understanding related to scientific research in a healthcare discipline and to create an academic research project. The course covers important concepts including selecting an appropriate research design, sampling, data collection, analyzing data, and thesis writing and presentation. The course is delivered through workshops, lectures, seminars etc. This course provides a progression learning pathway to the final project in physiotherapy.						
XXXX	XXX	Major Elective	X	X	3	
					<b>19</b>	

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**Second Semester**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
PTHH	499	Major Project	0	6	3	HCRM 498 AND Completion of at least 90 credits
Learners are required to conduct scientific research in the field of physiotherapy and/or health care, to develop and present an academic major project. Each learner will be required to select and complete a research project under the supervision of a faculty member. Assessment will take the form of a written report and an oral presentation. The major project should cover topics drawn from research serving issues related to physiotherapy.						
PTHH	421	Clinical: Pediatric Physiotherapy	0	8	4	PTHH 222 AND PTHH 223 AND PTHH 229
This is a fully practical course in a clinical setting aims to allow learners to practice the applied knowledge gained in pediatric physiotherapy skills. The training includes providing physiotherapy techniques for patients with cerebral palsy, new developmental abnormalities, congenital anomalies, Erb's palsy and other pediatric conditions.						
PTHH	422	Theories of Pediatric Physiotherapy	2	2	3	PTHH 222 AND PTHH 223 AND PTHH 229
The course provides critical knowledge and understanding relate to the principles of physiotherapy for paediatric diseases and injuries paediatric and juvenile diseases, congenital, acquired malformations are presented in systematic approach followed by assessment, indications and contraindications of physiotherapy treatment. The course includes pre- and post- operative physiotherapy procedures are discussed for paediatric surgical cases, practical training in assessment techniques, cerebral palsy testing, and Bobath concept.						
PTHH	423	Clinical: Pediatric Medicine & Surgery	2	2	3	PTHH 222 AND PTHH 223 AND PTHH 229
The course covers diagnosis, clinical presentation & treatment of common paediatric cases, the main topics in the course are introduction to genetics, embryology, intrauterine male function, neonatology, cerebral palsy types & diagnosis, Erb's palsy and other peripheral neonatal injuries, orthopaedic paediatric developmental, normal physiological developments and common paediatric surgical and medical conditions. The course is reinforced with clinical rounds with paediatric medical & surgical consultant and senior physiotherapist.						
PTHH	424	Clinical: Community Physiotherapy	0	6	3	PTHH 315 AND PTHH 323
This course covers practical exposure and applied knowledge related to physiotherapy services outside clinics and hospitals, mostly rehabilitation in the field of geriatrics, handicap or disabled children and promoting health education about common disease.						
PTHH	425	Occupational Health & Ergonomics in Physiotherapy	2	2	3	PTHH 314
This course trains students in the common role of the physiotherapist in industrial settings. This includes the function of the physiotherapist in prevention of injuries, workplace design and analysis, mechanism of repeated minor trauma, overuse and stress related injuries, muscle and other soft tissue failure and injuries, the concept of good posture, principles of patients and non-patients' health education and motivation and other related topics.						
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**LIST OF MAJOR ELECTIVE COURSES**

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
PTHH	426	Community Well-being and Public Health	3	0	3	
This course provides critical knowledge related to community wellbeing and public health principles for graduate level students in health field. Community wellbeing and public health focuses on the health of populations or groups. The course will cover a broad range of community wellbeing and public health issues and will focuses on strategies to improve the health of the populations with emphasis on health protection, disease prevention, health promotion and nutritional problem and its rehabilitation. At the end of the course the learners will be able to identify different practices for community wellbeing and share public health schemes that support improving the community at large.						
PTHH	427	Human Physical Growth and Development	3	0	3	
The course presents a description of the changes that a human being undergoes from conception to old age. It concentrates on theories and principles of growth and development; various stages of growth and development in terms of motor, perceptual, cognitive, language and psychological aspects; including effects of disability on the growth pattern in each age group. Such knowledge is important in approaching and evaluating patients with various ages and backgrounds.						
PTHH	428	Sports Injuries	3	0	3	
This course is designed to provide critical understanding of how sporting injuries can occur, the assessment, diagnosis, treatment and management of such injuries. The course will also investigate the principles behind the rehabilitation of sports injuries. By using a variety of techniques and approaches, the therapist will provide a valuable service to clients in this specialist area, either on a freelance basis or as part of their employment in a health and fitness facility.						
PTHH	429	Women's Health	3	0	3	
This course provides a critical knowledge and understanding on the topics of the women's health issues in different age periods from puberty, childbearing, menopause and postmenopausal. It focuses on theories and principles of physiotherapy assessment, techniques and modalities that can deal with these such issues, like pregnancy, labor, postnatal, menstrual problems, pelvic floor dysfunction, pre and post operative treatment programs concerning obstetrical and gynecological operations, obesity and its impact on the women's health. Acquisition of such knowledge is very important to the students to deal with new era in the health system.						

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