

## **BSc (Hons) Physiotherapy (4 Years F/T) - SC401 (Under Review)**

### **1. Special Note**

The Programme is designed to be a professional course, like the BSc (Hons) Medical Science and the BSc (Hons) Biomedical Sciences Programmes and the Diploma/BSc (Hons) Occupational Therapy currently run by the Department of Health and Medical Sciences. Accordingly, the degree of flexibility will differ from most BSc (Hons) Programmes being run by the Faculty. All modules are compulsory and assessment methods will be specific to the modules.

The programme design has taken into account the minimum requirements for the training and education of Physiotherapists set by the World Confederation of Physical Therapy.

### **2. Objectives**

The disability profile as indicated in the 2000 Housing and Population Census carried out by the Ministry of Finance and Economic Development revealed a 46.5% increase in the prevalence of disabilities when compared to the 1990 Census. Interestingly although more males than females were among the disabled population in 1990 and 2000, the female disabled population had been growing at a faster rate than the corresponding male population.

Physiotherapy is the skilled use of physiologically-based movement techniques, supplemented when necessary by massage, electrotherapy and other physical means for the prevention and treatment of injury and disease. It is used to assist the process of rehabilitation and restoration of function, including the achievement of personal independence. The work of the Physiotherapist is therefore essential to ensure a good quality of life of individuals (ranging from children to the elderly) with various disabilities (physical, neurological, psychosocial, sensory and other...) and rehabilitation needs and their integration in the community. The specific objective of the therapist is to function as an integral part of a multidisciplinary team to enable those whose abilities in productivity, self-maintenance and leisure are threatened, restricted or lost due to impairment, developmental delay, ageing or lack of opportunity, to become full and productive members of the community. Physiotherapists are therefore of paramount importance in the effective operation of the health care, social welfare and education systems.

The first three years of study have been designed to equip students with all the basic training needs of a Physiotherapist for general practice, including implementation of treatment, good communication and interpersonal skills and commitment to ethical and social responsibility. The fourth year of study leads to the award of a BSc (Hons) Physiotherapy and is designed to meet the research and administrative and management needs of the profession, including exposure to clinical electives. The clinical education training will provide the opportunity for translation of theoretical knowledge into hands-on practice of immediate relevance and will further help students in acquiring professional competence. Graduates with this degree can either pursue higher studies (MSc, MPhil/PhD) or seek employment locally and **internationally**.

The Programme being proposed is a very wide-reaching programme, open to private candidates as well as in-service trainees from various Ministries (including Health

and Quality of Life, Social Security, Education and Scientific Research), Non-Governmental Organisations and Private Organisations as well as individuals. Physiotherapists are employable in a wide range of areas (public and private health institutions, schools, NGOs) and can also choose private practice.

### 3. General Entry Requirements

As per General Entry Requirements for admission to the University for undergraduate degrees.

### 4. Programme Requirements

Credit in at least five subjects (School Certificate) including English, Biology, Mathematics, Physics and at least one other Science subject.

GCE Advanced Level passes (or equivalent) in three science subjects. Mathematics will count as a Science subject. Minimum grades should be two Bs and one C.

### 5. Programme Duration

	Normal	Maximum
BSc (Hons) Physiotherapy (F/T):	8 semesters (4 years)	12 semesters(6 years)

A Diploma exit point will only be available in special cases where a student has failed to obtain the minimum number of credits for the award of the BSc (Hons) Physiotherapy, but has obtained a minimum of 60 credits altogether which has to include the design of the research proposal.

### 6. Credits per Semester: Minimum 9 credits subject to regulation 5 above.

### 7. Specifications

Clinical Education Training in the form of clinical practice in MoH hospitals and other public/private institutions will form an essential part of the Professional Programme. Clinical practice will be undertaken for a day/week in semester 2, a day/week in Semesters 3 and 4, three days/week in Semesters 5 and 6 and four days/week in semesters 7 and 8. A formal agreement will need to be worked out with the MoHQL for students to use existing facilities for clinical education. Formal lectures/tutorials/practicals will be scheduled over the rest of the week as per Programme Structure. Students will be required to wear shorts and T-shirts for practical classes and practise techniques on one another.

Students must pass all modules in the Programme to be awarded the BSc (Hons) Physiotherapy.

### 8. Assessment

#### Continuous and Written Assessment of Modules

Each module will carry 100 marks (i.e. expressed as %) and will be assessed as follows (unless otherwise specified):

- **Written Exams**  
Each module, except where specified, will be assessed by a 2 hr written exam paper. Modules will be examined at the end of the semester in which they are taught. **The pass mark will be 50% for all papers.**
- **Clinical Education Training**

Clinical training is distributed throughout every year of the curriculum in the form of Clinical Physiotherapy modules (equivalent to 90 hrs of practice each- 3 credits each) and additional time spent in Clinical Blocks (180 hrs per semester over semesters 5 and 6, and 270 hrs per semester over semesters 7 and 8).

To ensure a depth of learning, clinical education will be guided and workplace skills assessed by a learning contract (an agreement about the particular knowledge, skill, or attitudes the student will develop as well as the roles and responsibilities of the student) and supervised and assessed by practising physiotherapists preferably with at least three years' experience or a physiotherapy lecturer. The clinical exams will carry 100 marks.

All clinical and written exams will carry a weighting of **60%** of the total marks with continuous assessment counting for the remaining **40%** of the marks.

Students' abilities (essential knowledge, skills and attitudes for competent practice) will be assessed for the single Clinical Physiotherapy modules through a clinical examination of 1 hour duration at the end of the module. The double Clinical Physiotherapy modules will be assessed by an end of year clinical examination of one hour duration at the end of the year.

Students must demonstrate that they have achieved the learning objectives specified in the learning contract. For the additional clinical blocks of 180 hrs and 270 hrs each, students will be assessed by continuous assessments and successful students will be awarded a satisfactory grade (Grade S). Students with unsatisfactory performance in the clinical blocks will be awarded a Grade U. Additional Clinical Blocks do not carry any credit. However a Grade S is required in these Clinical Blocks for the award of a BSc (Hons) Physiotherapy.

- **Practical Work and Continuous Assessment**

- **Modules including a Practical Component**

There will be no practical exams. Practical work will be assessed on a continuous assessment basis and will carry a weighting of 50% of the total marks awarded for the respective modules involved. The pass mark for the continuous assessment of practical work will be 50%.

Continuous assessment for the theory part of modules having a practical component may be in the form of assignments and should include at least one class test and will carry a weighting of 10% of total marks for the module.

- **Modules not including a practical component**

Continuous assessment for modules not including a practical component may be in the form of assignments and should include at least one class test and will carry a weighting of 40% of total marks for the respective modules.

- **For PTH modules**

Students who fail in up to 2 PTH modules, will be allowed to proceed to the following year and clearing the failed modules with the next cohort of students. However, students will not be allowed to take follow-up (clinical) PTH modules. Students who fail in more than 2 PTH modules, will repeat the year.

## **9. Grading Structure**

This will be as shown below taking into account that the pass mark for all modules is 50%.

#### GRADE POINT AVERAGE (GPA)

Under the GPA, the following letter grades and their grade point equivalent are used:

Letter Grade	Grade Point	Percentage Mark
A <sup>+</sup>	4.00	$90 \leq x \leq 100$
A		$80 \leq x < 90$
A <sup>-</sup>		$70 \leq x < 80$
B <sup>+</sup>	3.00	$65 \leq x < 70$
B		$60 \leq x < 65$
C	2.00	$50 \leq x < 60$
F	0	$x < 50$

#### 10. Classification of Award

The degree classification will be based on the **CPA** at the end of the Programme as follows:

CPA (%)	CLASSIFICATION
$\geq 70\%$	1 <sup>st</sup> Class
$60 \leq x < 70$	2 <sup>nd</sup> Class 1 <sup>st</sup> Division
$50 \leq x < 60$	2 <sup>nd</sup> Class 2 <sup>nd</sup> Division
$< 50$	No Award

} with Honours

#### 11. Termination of Registration

Registration will be terminated if CPA remains below 50 for two consecutive registered semesters.

A student's registration will lapse at the end of the semester in which s/he has successfully completed the minimum requirements for the award of the degree.

Registration will be terminated if a student repeats a year more than once.

#### 12. Modules of Special Nature

##### Audit Modules

Students who wish to follow specific module(s) or are advised to do so by a Department may audit same. Such Audit modules are not examinable but will appear in their transcript subject to satisfactory attendance (Grade S).

##### Self-Study Modules

Self-Study modules for unsuccessful candidates will only be available for non-professional modules.

#### 13. Important Note

The rules as stipulated in this Programme Structure and Outline Syllabus will replace all other rules and regulations.

#### 14. List of Modules

Code	Module Name	Hrs/Yr L/P	Credits
<b><u>Year 1</u></b>			
<i>Optional modules as per individual requirements</i>			
BMS 1011	Foundation Course in Biology	60/30	-
BMS 1012	Foundation Course in Physics	60/30	-
<b>Semester 1</b>			
BMS 1121	Introduction to Human Anatomy and Physiology	45/0	3
BOT 1121	Basic Pathology	45/0	3
HLS 1111	Health in Society I	30/30	3
HLS 1121	IT and Communication Skills for Health Sciences	30/30	3
PTH 1121	Movement Science I (Exercise Therapy)	30/30	3
<b>Semester 2</b>			
HLS 1211	Health in Society II	30/30	3
HLS 1221	Cardiovascular System	30/30	3
HLS 1231	Skeletal and Locomotor Systems	30/30	3
HLS 1241	Lungs and Respiratory Tract	45/0	3
PTH 1211	Clinical Physiotherapy I	0/90	3
PTH 1221	Movement Science II (Massage and Electrotherapy)	30/30	3
<b><u>Year 2</u></b>			
<b>Semester 1</b>			
HLS 2111	Health in Society III	30/30	3
HLS 2121	CNS (Head & Neck)	30/30	3
HLS 2131	CNS (Peripheral Nervous System)	30/30	3
PTH 2011	Clinical Physiotherapy II	0/90	3
PTH 2111	Movement Science III (Orthopaedics & Neuro-musculo-skeletal)	30/30	3
<b>Semester 2</b>			
HLS 2211	Health in Society IV	30/30	3
HLS 2221	Basic Microbiology	30/30	3
PTH 2011	Clinical Physiotherapy II	0/90	3
PTH 2211	Women and Child Health	45/0	3
PTH 2221	Movement Science IV (Cardiorespiratory & Paediatric Neurology)	30/30	3
PTH 2231	Medicine and Surgery	45/0	3
<b><u>Year 3</u></b>			
<b>Semester 1</b>			
BOT 4111	Health Research Methods	30/30	3

HLS 3111	Health in Society V	30/30	3
PTH 3011	Clinical Physiotherapy III	0/90	3
PTH 3111	Movement Science V (Orthopaedics & Neuro-musculo-skeletal)	30/30	3

### Semester 2

HLS 3211	Basic Pharmacology	45/0	3
PTH 3011	Clinical Physiotherapy III	0/90	3
PTH 3211	Movement Science VI (Cardiorespiratory & Adult Neurology)	30/30	3
PTH 3221	Psychology for Health Sciences	45/0	3

### Year 4

#### Semester 1

PTH 4000	Research Project	-	
PTH 4011	Clinical Physiotherapy IV	0/90	3
PTH 4111	Movement Science VII (Intensive Care)	30/30	3
PTH 4121	Practice Management	45/0	3

#### Semester 2

PTH 4000	Research Project	10	
PTH 4011	Clinical Physiotherapy IV	0/90	3
PTH 4211	Movement Science VIII (Specialised Topics)	30/30	3

## 15. Programme Plan - BSc (Hons) Physiotherapy

### YEAR 1

Semester 1			Semester 2		
Code	Module Name	Credits	Code	Module Name	Credits
BMS 1011 or BMS 1012 BMS 1121	Foundation Course in Biology or Foundation Course in Physics Introduction to Human Anatomy and Physiology	- 3	BMS 1011 or BMS 1012 HLS 1211	Foundation Course in Biology or Foundation Course in Physics Health in Society II	- 3
BOT 1121	Basic Pathology	3	HLS 1221	Cardiovascular System	3
HLS 1111	Health in Society I	3	HLS 1231	Skeletal and Locomotor Systems	3
PTH 1121	Movement Science I (Exercise Therapy)	3	HLS 1241	Lungs and Respiratory Tract	3
HLS 1121	IT and Communication Skills for Health Sciences	3	PTH 1211	Clinical Physiotherapy I	3
			PTH 1221	Movement Science II (Massage & Electrotherapy)	3

### YEAR 2

Semester 1			Semester 2		
Code	Module Name	Credits	Code	Module Name	Credits
HLS 2111	Health in Society III	3	HLS 2211	Health in Society IV	3
HLS 2121	Central Nervous System (Head & Neck)	3	HLS 2221	Basic Microbiology	3
HLS 2131	Central Nervous System (Peripheral Nervous System)	3	PTH 2011	Clinical Physiotherapy II	3
PTH 2011	Clinical Physiotherapy II	3	PTH 2211	Women & Child Health	3
PTH 2111	Movement Science III (Orthopaedics & Neuromusculo-skeletal)	3	PTH 2221	Movement Science IV (Cardiorespiratory & Paediatric Neurology)	3
			PTH 2231	Medicine & Surgery	3

### YEAR 3

Semester 1			Semester 2		
Code	Module Name	Credits	Code	Module Name	Credits
BOT 4111	Health Research Methods	3	HLS 3211	Basic Pharmacology	3
HLS 3111	Health in Society V	3	PTH 3011	Clinical Physiotherapy III	3
PTH 3011	Clinical Physiotherapy III	3	PTH 3211	Movement Science VI (Cardiorespiratory & Adult Neurology)	3

PTH 3111	Movement Science V (Orthopaedics & Neuro-musculo-skeletal)	3	PTH 3221	Psychology for Health Sciences	3
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#### YEAR 4

<b>Semester 1</b>			<b>Semester 2</b>		
Code	Module Name	Credits	Code	Module Name	Credits
PTH 4000	Research Project	-	PTH 4000	Research Project	10
PTH 4011	Clinical Physiotherapy IV	3	PTH 4011	Clinical Physiotherapy IV	3
PTH 4111	Movement Science VII (Intensive Care)	3	PTH 4211	Movement Science VIII (Specialised Topics)	3
PTH 4121	Practice Management	3			

## 16. Outline Syllabus

This outline syllabus is not prescriptive and is intended to serve as a guide only.

*\*All modules pertaining to 'Movement Science' I–VIII will contain components of relevant instrumentation and techniques.*

### **BMS 1011 - FOUNDATION COURSE IN BIOLOGY**

This module will be equivalent in level to Biology A level and will be compulsory for students not holding A levels in Biology. The A level syllabus (Core subjects + relevant electives) prevailing at the time the module is being taught will be adopted. Includes a practical component.

### **BMS 1012 - FOUNDATION COURSE IN PHYSICS**

This module will be equivalent in level to Physics A level and will be compulsory for students not holding A levels in Physics. The A level syllabus (Core subjects + relevant electives) prevailing at the time the module is being taught will be adopted. Includes a practical component.

### **BMS 1121 - INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY**

Introduction to human anatomy: anatomical terminology and topography. The endocrine system. The central and peripheral nervous system. The gastrointestinal system: nutrition and digestion. Structure and function of circulatory system: heart, blood vessels, lymphatics, lymph nodes, spleen. Control of Heart Beat and the Cardiac cycle. Structure and function of kidneys: excretion and osmoregulation. Mechanism and control of breathing. Control of growth and reproduction in man. Support, movement and muscle contraction: major muscle groups, ultrastructure of skeletal muscle, contractile mechanisms, skeleton, hard connective tissue. Integument: structure and function of skin, buccal cavity, teeth. General principles and social aspects of human health and disease: diet, gaseous exchange, exercise, drugs, infectious diseases. Fundamentals of the immune system and immune responses. Immune regulation. Autoimmune diseases.

### **BOT 1121 - BASIC PATHOLOGY**

Review of basic cell biology. Introduction to pathology. Characteristics of disease. Nomenclature and classification of disease. Genetic and environmental causes of disease. Diagnostic pathology. Sublethal and lethal injury. Toxic and hypoxic injury. Agents causing injury. Apoptosis and necrosis. Abnormal tissue deposits. Acute inflammation: basic mechanisms and sequelae. Chronic inflammation. Healing and repair, including skin repair. Overview of: cardiovascular disease, urinary and reproductive system disease, respiratory disease, gastrointestinal and liver disease.

### **BOT 4111 - HEALTH RESEARCH METHODS**

Will cover the importance of research, types of research, research designs, ethics in research,

measurements in research, and analyses of research data. Students will learn how to critique research articles and will develop a written research protocol.

#### **HLS 1111 - HEALTH IN SOCIETY I**

This module focuses on the 'family' and includes Family Study project work on pregnancy, birth, and the impact of a baby in a family setting, human development from infancy to adolescence, and sociological and psychological perspectives of families. Communication and research skills will be developed in the module.

#### **HLS 1121 - IT AND COMMUNICATION SKILLS FOR HEALTH SCIENCES**

Introduction to Computers. Hardware and Software. Input, Output and Storage. Business Area Analysis. Organization of Data. Systems Analysis of Design. Data Communications. Impact of Computers on Society. Future of Computing. Practical Sessions. In addition, the module will address the basic principles of written and oral communication and specific skills required for effective communication in the academic context, work context and in society at large.

#### **HLS 1211 - HEALTH IN SOCIETY II**

In this module people will be considered in 'Populations and Societies'. Epidemiological science will be introduced: causes, spread, measurement, determinants and prevention of disease will be closely examined. The life cycle strand which addresses adulthood includes work on sexuality. Ways people behave in groups, communities and societies are considered in the psychology and sociology sessions.

#### **HLS 1221 - CARDIOVASCULAR SYSTEM**

The basic anatomy and function of the heart and pericardium will be discussed with the function and microanatomy of cardiac muscle. Septation of the heart and the foetal circulation will be considered in outline. Pressure changes and sounds during a single cardiac cycle together with the associated electrical events will be stressed. In addition nervous control of heart rate and hormones which have major effect will be included as will drugs such as atropine, calcium channel blockers and cardiac glycosides which have major effects.

The general structure of the peripheral circulation and its histology will be discussed and the mechanism by which blood returns to the heart. The baroreceptor reflexes and other controllers of blood pressure will be included as will some central control mechanisms. Diseases of the heart and circulation will be considered briefly.

#### **HLS 1231 - SKELETAL AND LOCOMOTOR SYSTEMS**

Biochemistry and physiology of connective tissues and collagen. Review calcium homeostasis. Classification, structure and function of joints. Anatomy of the upper limb: shoulder joint and the rotator cuff; the axilla and the brachial plexus; elbow joint and cubital fossa; flexor and extensor compartments of upper arm; wrist joint and hand; flexor and extensor compartments; movements of pronation and supination. Blood and nerve supply to the upper extremities.

Axial skeleton and load bearing: anatomy of the vertebral column; regional variations in vertebral structure; intervertebral joints; low back pain and herniation of intervertebral disc.

Anatomy of lower limb: hip joint; flexors, extensors and adductors of the hip; surgical anatomy of the femur. The knee joint; flexors and extensors of the knee. Ankle joint and movement at the ankle. The foot. Biomechanics of joint. Nerve supply to the lower limb. Blood supply to lower limb.

Fracture repair. Rheumatic disorders and arthritis. Introduction to rehabilitation.

Muscle contraction mechanisms and nervous control.

#### **HLS 1241 - LUNGS AND RESPIRATORY TRACT**

The basic anatomy of the thorax and diaphragm will be explored and the way the rib cage moves during ventilation under the influence of various respiratory muscles discussed. The pressures in the pleural cavity and other changes during a ventilatory cycle will be described

as will movement and flow in the airways. Gas exchange across the alveoli will be described and effects of altering the various partial pressures of gasses explored. Narrowing of the airways and its consequences will be given prominence together with drugs which alter the resistance of the airways. The importance of chronic disease and cyanosis will be emphasised.

#### **HLS 2111 - HEALTH IN SOCIETY III**

This module focuses on 'People as Patients' and patients as people. It includes a Patient Study based on the impact of a chronic condition on the life of a person, and his immediate family or carers. There will also be sessions on ageing, which is a continuing part of the life cycle strand.

#### **HLS 2121 - CENTRAL NERVOUS SYSTEM - HEAD & NECK**

Anatomy of the head: gross topography of the brain and spinal cord; anatomy of the skull. The meninges and blood supply to the brain. The cranial cavity and its contents, including osteology of the bone of the skull, cranial nerve exits, reflections of the dura mater and dural venous sinuses. Production, circulation and reabsorption CSF. Development of the head and neck: development of neural tube and spinal cord anatomy; embryology of pharynx and its derivatives, the face and palate, and the tongue and thyroid gland. Face, nose and paranasal sinuses; cranial nerve V and VII; facial sensation and facial expression. Common abnormalities of cleft face and lip and cleft palate. Bell's palsy. Anatomy of the infratemporal fossa and oral cavity; cranial nerve V; mastication and deglutition. The tongue and pharynx; cranial nerves IX and XII.

#### **HLS 2131 - CENTRAL NERVOUS SYSTEM - PERIPHERAL NERVOUS SYSTEM**

Neuroanatomy and physiology of the somatosensory systems: receptors, spinal cord and brainstem pathways. The thalamus and introduction to the cerebral cortex: sensory areas. Audition and balance: anatomy and physiology of the outer, middle and inner ear; VIII cranial nerve and the central pathways for hearing and balance. 'Glue ear'. Vision: anatomy and physiology of the eye, optic nerve, optic tract and visual pathways. Anatomy of the orbit and extraocular apparatus; cranial nerves III, IV and VI. Visual and retinal fields. Visual reflexes. Neuroanatomy and physiology of motor system: motor cortex, basal ganglia and cerebellum; motor pathways in the brainstem and spinal cord. Upper and lower motor neurones. Phonation: anatomy of larynx and pharynx; anatomy of neck. Physiology of speech and its neural control. Neurophysiology of higher functions: the limbic system and memory. Rhinencephalon, taste and olfaction.

#### **HLS 2211 - HEALTH IN SOCIETY IV**

This module turns its attention to 'Healthy People'. It includes work on relationships and health, health promotion and stages in adjustment to dying and responses to bereavement.

#### **HLS 2221 - BASIC MICROBIOLOGY**

Students will be introduced to the microbial world and made aware of existing tools to explore it; the importance of microbes in the biosphere and their active role in shaping life on planet earth will be examined. Starting from a historical perspective, the central role that microbes play in medicine will be investigated. The biology of microorganisms will be explored with a view to understand how microbes work and how a knowledge of microorganisms helps in understanding the biology of humans. Aspects of taxonomic relationships, safe laboratory practice and general techniques in culturing, staining and quantification will be covered.

#### **HLS 3111 - HEALTH IN SOCIETY V**

Students will be introduced to various health organisations existing in Mauritius: Primary health care, community health, Area Health Centres, Occupational Health, Public Health, WHO, Private Clinics. The impact of these organisations on health care will be examined. The role

of community-based rehabilitation, various NGOs and private organisations will be addressed.

#### **HLS 3211 - BASIC PHARMACOLOGY**

A basic understanding of how drugs work beginning with pharmacokinetics, receptor binding, transport of drugs intracellularly, absorption, excretion, volumes of distribution and clearance. It is anticipated that some of this module will be taught by computer assisted learning. Examples of drugs will be given in this module where more specific action will be dealt with in appropriate modules.

#### **\*PTH 1121 - MOVEMENT SCIENCE I (EXERCISE THERAPY)**

Biomechanics of the human body, kinetic handling, and the basic concepts involving physiotherapy; Description of active movement in terms of anatomical movements, axes and planes, range, types of muscle work, major muscle groups performing the action and group action of muscles; Evaluation of muscle strength and movement in joints; Techniques for strengthening weak muscles; Analyses of posture and gait; Use of walking aids.

#### **PTH 1211 - CLINICAL PHYSIOTHERAPY I**

Exposure of students to the clinical environment under the supervision of a qualified physiotherapist. Students will not directly handle patients, but will have opportunity to interact with patients and formal and informal caregivers of patients through interviews, history taking and observations. In preparation for this module, the student is required to show evidence of satisfactorily completing one week of elective in nursing care under the supervision of nursing administrators.

#### **\*PTH 1221 - MOVEMENT SCIENCE II (MASSAGE AND ELECTROTHERAPY)**

Electrotherapy incorporates the learning of the basic Physics concepts applicable to physiotherapy as well as the use of the various electrophysical agents that are used in the management of patients by physiotherapists. Therapeutic massage includes the learning of the basic neuromuscular techniques and specialised massage techniques that are employed by physiotherapists while treating patients.

#### **PTH 2011 - CLINICAL PHYSIOTHERAPY II**

Students spend a portion of the week in various clinical areas covering chronic paediatrics, orthopaedics, neuromusculoskeletal, obstetrics and gynaecology, and community, working with patients under supervision. The students will also participate in clinical reasoning sessions.

#### **\*PTH 2111 - MOVEMENT SCIENCE III (ORTHOPAEDICS & NEURO-MUSCULO-SKELETAL)**

Orthopaedics: Covers the scope of traumatic orthopaedics in terms of understanding the presentation and basic principles of orthopaedic management, as well as the appropriate physiotherapy interventions. The focus is on the assessment and treatment of simple fractures of the limbs and the spinal column. Neuromusculoskeletal: This is an introduction into the assessment and treatment of peripheral neuromusculoskeletal conditions. The focus is on the physiotherapy management of those conditions that are commonly seen in community based out-patients clinics.

#### **PTH 2211 - WOMEN AND CHILD HEALTH**

Women Health: Will cover pregnancy and the changes that this brings to the mother, as well as parturition; Pre and post natal exercises; Mastectomy.

Child Health: Will cover Epidemiology of childhood disability in Mauritius; Prevention of childhood disabilities; Physiotherapy management of skeletal congenital abnormalities.

#### **\*PTH 2221 - MOVEMENT SCIENCE IV (CARDIORESPIRATORY AND PAEDIATRIC NEUROLOGY)**

Cardiorespiratory: This component covers the theory and practical application of cardiopulmonary rehabilitation in medical conditions in children and adults, such as asthma, chronic bronchitis, lung abscess, and bronchiectasis.

Paediatric Neurology: This component covers the theory of child development as well as the assessment and treatment techniques used by physiotherapists in the field of Paediatric Neurology.

#### **PTH 2231 - MEDICINE AND SURGERY**

Will cover the aetiology, clinical signs and symptoms, assessment and medical and surgical treatment of patients, in all age groups suffering from conditions encountered in physiotherapy.

#### **PTH 3011 - CLINICAL PHYSIOTHERAPY III**

Students will spend a portion of the week in various clinical areas offering services to patients with respiratory, orthopaedic, neurological, surgical and medical conditions, working with patients under supervision and participate in clinical reasoning sessions.

#### **\*PTH 3111 - MOVEMENT SCIENCE V (ORTHOPAEDICS & NEURO-MUSCULO-SKELETAL)**

Orthopaedics: Focuses on congenital and acquired pathologies, joint replacements and non-traumatic spinal conditions. It covers the relevant orthopaedic management and appropriate physiotherapy interventions.

Musculoskeletal: This component is a progression of previously learnt techniques (PTH 2111) to include vertebral mobilisation as it relates to normal movement, function and stability. It is designed to equip students with an integrated approach to working with neuro-musculo-skeletal disorders in the clinical setting.

#### **\*PTH 3211 - MOVEMENT SCIENCE VI (CARDIORESPIRATORY & ADULT NEUROLOGY)**

Cardiorespiratory: This component covers the theory and practical application of cardiopulmonary rehabilitation in surgical conditions in cardiology, chest trauma, and thoracic surgery. Adult Neurology: This component aims to equip the student with key knowledge and skills pertaining to the physiotherapy management of a variety of adult neurological conditions.

#### **PTH 3221 - PSYCHOLOGY FOR HEALTH SCIENCES**

Introduces students to some of the major theoretical perspectives in Psychology on the nature of human beings, and to the concept of psychological development, with emphasis placed on the cultural contexts of human development.

#### **PTH 4000 - RESEARCH PROJECT**

Students, working individually or in groups, will conduct a research project in physiotherapy after the research protocol is approved. Students will submit a research dissertation in the prescribed format, and between 8000 – 10,000 words.

#### **PTH 4011 - CLINICAL PHYSIOTHERAPY IV**

Students will spend a portion of the week in various clinical areas offering services to patients with respiratory, orthopaedic, neurological, surgical and medical conditions, including Intensive Care Unit. The students will work with patients under supervision and participate in clinical reasoning sessions.

#### **\*PTH 4111 - MOVEMENT SCIENCE VII (INTENSIVE CARE)**

This module includes the pathophysiology of respiratory failure, a basic knowledge of the technology employed in an Intensive Care Unit (ICU), a knowledge of how to assess comprehensively a patient in ICU and formulate an appropriate problem list, a theoretical understanding of the physiotherapy techniques which may be used in ICU, and an insight into the possible dangers, precautions and contra-indications which may be observed when

working in ICU.

**PTH 4121 - PRACTICE MANAGEMENT**

Emphasis is on developing administrative skills to prepare the students for work. It includes topics on service administration, leadership, human resource development, and ethics as they relate to behaviour in the work place, legal requirements and regulations of professional boards.

**\*PTH 4211 - MOVEMENT SCIENCE VIII (SPECIALISED TOPICS)**

Consists of variety of workshops/lectures on specialist topics within Physiotherapy, and includes cardiac rehabilitation, rehabilitation after sports injuries, hydrotherapy, geriatric rehabilitation, burns and bandaging.