BACHELOR OF HEALTH SCIENCES IN BIOKINETICS

(Qualification type: Professional Bachelor's Degree)

BHSci (Biokinetics) - NQF Level 8 (480 credits)

Qualification code: BPBK20

SAQA ID: 109415, CHE NUMBER: H/H16/E107CAN

Campus where offered: Pretoria Campus

REMARKS

a. *Admission requirement(s) and selection criteria:*

- **APPLICANTS WHO OBTAINED A SENIOR CERTIFICATE BEFORE 2008:**

  Admission requirement(s):
  A Senior Certificate with a matriculation endorsement or equivalent qualification, with an E symbol at Higher Grade, or C symbol at Standard Grade for English, Mathematics, Physical Science and Biology or Physiology.

  Selection criteria:
  To be considered for this qualification, candidates must have an Admission Point Score (APS) of at least **24**.

- **APPLICANTS WHO OBTAINED A NATIONAL SENIOR CERTIFICATE IN OR AFTER 2008:**

  Admission requirement(s):
  A National Senior Certificate or an equivalent qualification, with a bachelor's degree endorsement, or an equivalent qualification, with an achievement level of at least 4 for English (home language or first additional language), 4 for Mathematics or Technical Mathematics, 4 for Physical Sciences or Technical Sciences and 4 for Life Sciences.

  Selection criteria:
  To be considered for this qualification, candidates must have an Admission Point Score (APS) of at least **24** (excluding Life Orientation).

b. *Assessment procedure(s):*
For 2022: Candidates will be selected based on their relevant APS scores.
As from 2023: The selection process will consist of the following phases:
  - Phase 1: an administrative screening process of the academic performance score (APS) of each student. This score will contribute a weight of 50% to the overall selection process.
  - Phase 2: if the APS is 24 and above, the applicant will proceed to write a selection test that will have a weight of 50%. Selection to be done in accordance with the Health Professional Council of South Africa (HPCSA).

  Please take note that all completed applications received within the published due dates will be ranked. After consideration of the Departmental Student Enrolment Plan, only the top ranking applicants will be selected. Once a programme is full, a waiting list will be in place to provide an opportunity for applicants to fill places of those who did not register on time. Applicants will be informed of their status per official letter from the Office of the Registrar, alternatively, they can check their application status on the TUT website, www.tut.ac.za.

c. *Recognition of Prior Learning (RPL), equivalence and status:*
See Chapter 30 of Students' Rules and Regulations.

d. *Intake for the qualification:*
January only.

e. *Presentation:*
Day classes.

f. *Minimum duration:*
Four years.

g. *Exclusion and readmission:*
See Chapter 2 of Students' Rules and Regulations.

h. *Work-Integrated Learning I and II:*
See Chapter 5 of Students' Rules and Regulations.

i. *Other requirements:*
Immunisation against Hepatitis B is compulsory. A valid first-aid certificate is required. The University will arrange a first-aid programme in the first year. International students will be assessed by the Department to determine enrolment for this qualification.

j. *Special qualification rules:*
Special qualification rules apply, and students who register for this qualification will receive the rules with their letter of acceptance. It is the students' own responsibility to familiarise themselves with those rules.

k. *Professional registration with HPCSA:*
The student must register with the HPCSA for the duration of their studies. The student enrolls in their first year as a student Biokineticist (BKS), and upon completion of the qualification, the graduate may register as an independent, registered Biokinetics practitioner.

CURRICULUM

FIRST YEAR

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
11P105X	Communication for Academic Purposes	(5)	(10)	
CPL105X	Computer Literacy	(5)	(10)	
ETP105P	Exercise Testing and Exercise Prescription I	(5)	(18)	
HAN105P	Human Anatomy I	(5)	(18)	
HPR105P	Health Promotion I	(5)	(20)	
HPY105P	Human Physiology I	(5)	(18)	
LFS125X	Life Skills (block module)	(5)	(2)	
NUT105P	Nutrition I	(5)	(12)	
FIRST SEMESTER				
MLH116P	Motor Learning and Human Development I	(6)	(6)	
SECOND SEMESTER				
RPR115P	Research Principles I	(5)	(6)	
TOTAL CREDITS FOR THE FIRST YEAR:			**120**	

SECOND YEAR

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
BMH205P	Biomechanics I	(5)	(18)	Human Anatomy I Human Physiology I
ETP206P	Exercise Testing and Prescription II	(6)	(12)	Exercise Testing and Prescription I
HAN206P	Human Anatomy II	(6)	(18)	Human Anatomy I
HPR206P	Health Promotion II	(6)	(12)	Health Promotion I
HPY206P	Human Physiology II	(6)	(18)	Human Physiology I
ORT206P	Orthopaedics I	(6)	(12)	Human Anatomy I Human Physiology I
PTP206P	Pathophysiology I	(6)	(12)	Human Anatomy I Human Physiology I

FIRST SEMESTER

APV215P	Adapted Physical Activity I	(5)	(6)	
RPR216P	Research Principles II	(6)	(12)	Research Principles I

TOTAL CREDITS FOR THE SECOND YEAR: **120**

THIRD YEAR

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
DTA307P	Data Analysis	(7)	(12)	Research Principles II
ETP307P	Exercise Testing and Prescription III	(7)	(18)	Exercise Testing and Prescription II
EXP307P	Exercise Physiology I	(7)	(12)	Human Physiology II
HAM307P	Health Care Administration and Management I	(7)	(12)	
ORT307P	Orthopaedics II	(7)	(18)	Orthopaedics I
PCD307P	Pathophysiology of Chronic Diseases II	(7)	(18)	Pathophysiology I
WBK307P	Work-Integrated Learning I	(7)	(18)	Adapted Physical Activity I Exercise Testing and Prescription II Health Promotion II Orthopaedics I

SECOND SEMESTER

MBR315P	Medical Law, Bio-Ethics and Human Rights	(5)	(6)	
PMY315P	Pharmacology	(5)	(6)	

TOTAL CREDITS FOR THE THIRD YEAR: **120**

FOURTH YEAR

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
ETP408P	Exercise Testing and Prescription IV	(8)	(12)	Exercise Testing and Prescription III
HAM408P	Health Care Administration and Management II	(8)	(12)	Health Care Administration and Management I
ORT408P	Orthopaedics III	(8)	(12)	Orthopaedics II
PCD408P	Pathophysiology and Chronic Diseases III	(8)	(12)	Pathophysiology of Chronic Diseases II

RBK408P	Research Project	(8)	(30)	Data Analysis Exercise Testing and Prescription III Medical Law, Bio-Ethics and Human Rights Orthopaedics II Pathophysiology of Chronic Diseases II
WBK408P	Work-Integrated Learning II	(8)	(36)	Exercise Testing and Prescription III Orthopaedics II Pathophysiology of Chronic Diseases II Work-Integrated Learning I

FIRST SEMESTER

PSE418P	Professional Standards and Ethics	(8)	(6)

TOTAL CREDITS FOR THE FOURTH YEAR: **120**

TOTAL CREDITS FOR THE QUALIFICATION: **480**

MODULE INFORMATION (OVERVIEW OF SYLLABUS)

The syllabus content is subject to change to accommodate industry changes. Please note that a more detailed syllabus is available at the Department or in the study guide that is applicable to a particular module. At time of publication, the syllabus content was defined as follows:

A

ADAPTED PHYSICAL ACTIVITY I (APV215P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module equips students with knowledge, skills and values to safely promote health, physical activity, participation and sport performance for people with disabilities. The purpose is to offer students with the needed theoretical knowledge, practical experience and relevant designation to render services in Adapted Physical Activity. (Total notional time: 60 hours)

B

BIOMECHANICS I (BMH205P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module prepares the student within the field of Biomechanics related to physical activity and exercise. On completion, a student will be able to apply knowledge about anatomy and biomechanics to the evaluation of the strengths and weaknesses of the performance of sport and exercises techniques. (Total notional time: 180 hours)

C

COMMUNICATION FOR ACADEMIC PURPOSES (11P105X) **1 X 3-HOUR PAPER**

(Module custodian: Office of the Executive Dean)

A workable knowledge of English is an essential skill for any graduate who is required to conduct themselves successfully in a professional working environment. This module will equip students with the competencies required to compose a selection of written texts related to communicating both internally and externally within a professional environment. In addition, the module includes strategies that are essential for the effective communication in various situations, including small groups to avoid unproductive conflict, a multicultural context, etc. (Total notional time: 100 hours)

COMPUTER LITERACY (CPL105X) **CONTINUOUS ASSESSMENT**

(Module custodian: End User Computing Unit)

This module provides students with foundational knowledge in computing fundamentals, essential digital skills in key applications based on MS Office Suite and network basics (i.e. MS Outlook and Internet). Online exams are mapped with End-User Computing: SAQA 49077 (61591) Core Element as well as Internet and Computing Core Certification (IC3). (Total notional time: 100 hours)

D

DATA ANALYSIS (DTA307P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module teaches the student how to choose the correct statistical method before gathering data. The student will know the correct way to collect the data and how to analyse the data. The theory of data analysis is dealt with in preparation for the student to write a research proposal in his/her 4th year. The student will be able to recognise different statistical methods for different type of research. The research process and protocol will be taught to enable the student to become a competent researcher. (Total notional time: 120 hours)

E

EXERCISE PHYSIOLOGY I (EXP307P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module enables students to apply their knowledge to demonstrate an understanding of the acute and chronic physiological responses to exercise, as well as the physiological basis of exercise performance. The module examines the metabolic supply of energy to exercising muscle; the acute responses of the cardiovascular, respiratory, thermoregulatory, neural, endocrine and muscular systems to exercise; and the chronic physiological responses to exercise training. In addition, the module focuses on exercise related age and sex consideration and cardiovascular disease, obesity and diabetes in relation to physical activity. (Total notional time: 120 hours)

EXERCISE TESTING AND EXERCISE PRESCRIPTION I (ETP105P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

The student will be able to apply his/her knowledge of foundational principles in exercise testing and prescription for apparently healthy individuals. Both field and laboratory testing will be learnt to facilitate the assessment/interpretation of health and skill related components of fitness. Principles in exercise prescription using technological equipment and software will be learnt, in accordance with the FIIT principle, to improve functional performance and health promotion. The student will be able to demonstrate the ability to use a range of specialised skills, in exercise testing and prescription. (Total notional time: 180 hours)

EXERCISE TESTING AND PRESCRIPTION II (ETP206P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

The student will be able to apply his/her knowledge of exercise management for the diseased population. Clinical and laboratory testing will be learnt to facilitate the assessment/interpretation of diseased patients. Principles in exercise prescription will be learnt in accordance with individualised exercise programmes aimed at improving the functional ability of cardiac, metabolic and pulmonary disease patients. Students will be able to demonstrate an ability to use a range of specialised skills in exercise testing and prescription in chronic disease patients. (Total notional time: 120 hours)

EXERCISE TESTING AND PRESCRIPTION III (ETP307P) **1 X 3-HOUR PAPER AND PRACTICAL EXAMINATION**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module prepares the student to test readiness for exercise and prescribe individualised exercise programmes for persons with orthopaedic disabilities, immunological disease, neuromuscular disorders, cognitive/sensory deficits and special population. The student will be able to apply his/her knowledge of exercise management for persons with orthopaedic disabilities, immunological disease, neuromuscular disorders, cognitive/sensory deficits and special population. Clinical and laboratory testing will be learnt to facilitate the assessment/interpretation of clinical and diseased patients. (Total notional time: 180 hours)

EXERCISE TESTING AND PRESCRIPTION IV (ETP408P) **1 X 3-HOUR PAPER AND PRACTICAL EXAMINATION**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module prepares the student to test readiness for exercise and prescribe individualised exercise programmes for multiple chronic conditions. The student will be able to apply his/her knowledge of exercise readiness and prescription for multiple chronic conditions. The student will be able to apply his/her knowledge of exercise management for multiple chronic conditions. The module will provide the students with a hands-on or practical experience at the various Biokinetics facilities, which would facilitate learning in exercise testing and prescription for multiple chronic conditions under supervision. (Total notional time: 120 hours)

H

HEALTH CARE ADMINISTRATION AND MANAGEMENT I (HAM307P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Management and Entrepreneurship)

The student will be able to demonstrate integrated knowledge and the application of strategic management processes, different management models, importance and utilisation of human resources within a health care environment. This module prepares the student to enter the medical profession. (Total notional time: 120 hours)

HEALTH CARE ADMINISTRATION AND MANAGEMENT II (HAM408P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Management and Entrepreneurship)

This module provides the student with the theoretical underpinnings of the field of health-care administration management and to provide guidance on governing and managing within a business. Furthermore, this module will assist in developing the skills necessary to make administrative and management decisions and to manage the myriad of managerial dilemmas faced by managers. (Total notional time: 120 hours)

HEALTH PROMOTION I (HPR105P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module prepares the student with the ability to evaluate key issues relating to health promotion and public health, have an in-depth knowledge and understanding of the benefits of physical activity in the prevention and treatment of various health conditions which are of growing concern worldwide which include problems associated with risk factors, hypokinetic and sedentariness. It provides the student with an in-depth understanding of conditions which are major health issues and threaten the health and wellness of individuals. (Total notional time: 200 hours)

HEALTH PROMOTION II (HPR206P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module prepares the student with the ability to evaluate key issues relating to health promotion and public health and to apply specialised knowledge, understanding, skills and attitudes related to health promotion and health education. (Total notional time: 120 hours)

HUMAN ANATOMY I (HAN105P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Biomedical Sciences)

This module prepares the student to enter the medical profession. The student will be able to understand and apply his/her knowledge of cellular components, tissue and organ systems to and overall perspective of a healthy human necessary in the medical community. Upon completion of the module, the student will be able to understand important cellular concepts, identify all bones, muscles, nerves and have a sound basis of each organ system. Students will also have mastered the practical skills to be confident in all human body structures and location. (Total notional time: 180 hours)

HUMAN ANATOMY II (HAN206P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Biomedical Sciences)

This module builds on prior knowledge of human anatomy and physiology. Upon completion, the student will be able to apply his/her knowledge of cellular components, tissue and organ systems to and overall perspective of a healthy human necessary in the medical community. Upon completion of the module, the student will be able to understand important cellular concepts, identify all bones, muscles, nerves and have a sound basis of each organ system which includes the embryological development of each system. Students will also have mastered the practical skills to be confident in identifying all human body structures and location. (Total notional time: 180 hours)

HUMAN PHYSIOLOGY I (HPY105P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Biomedical Sciences)

The student will be able to apply his/her knowledge of the organisation of the human body, principles of support and movement, control systems of the human body such as the skeletal-, cardiac-, endocrine-, and nervous system, maintenance of the human body, and continuity in theoretical and practical contexts contributing to the body of knowledge necessary in the medical community. Upon completion of the module, the student will be able to identify, explain and apply concepts and processes related to physiology, their control and regulation such as homeostasis, nutrition, movement and reproduction and distinguish between mechanical, biochemical and physical functions in a living system and how each system integrates with other systems in the human body. Students will also have the practical skills to be confident in all human body functions and their roles. (Total notional time: 180 hours)

HUMAN PHYSIOLOGY II (HPY206P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Biomedical Sciences)

The student should demonstrate detailed knowledge of the human body's cellular and chemical organisation, the principles of support and movement, the control and maintenance of the human body through the various organ systems, pathophysiology of organ systems and continuity contributing to their understanding of the physiology of a healthy human body. Upon completion, the student will be able to identify, explain and apply concepts and principles of organisation of the human body, control-, maintenance-, and pathophysiology of organ systems, sensory organs and continuity to the extent that they are able to successfully undertake various discipline specific modules related to human physiology. Students will also have the practical skills to be confident in all human body functions and their roles and apply this knowledge in a clinical setting. (Total notional time: 180 hours)

L

LIFE SKILLS (LFS125X) **CONTINUOUS ASSESSMENT**

(Module custodian: Directorate of Student Development and Support)

Personal, socio-emotional and academic skills development for students in higher education. This module includes 1. Intra- and interpersonal skills (e.g. emotional intelligence, relationships, and conflict management); 2. General study skills (e.g. time management, goal setting, learning styles); 3. Health and wellness (e.g. HIV/AIDS, GBV issues, substance abuse); 4. Student life and adjustment (e.g. identity development, adjusting to a higher education environment); and 5. Financial management. (Total notional time: 20 hours)

M

MEDICAL LAW, BIO-ETHICS AND HUMAN RIGHTS (MBR315P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Biomedical Sciences)

The module will present the following main learning areas: 1. Medical law, specifically legal principles and business law; and 2. Bio-ethics and human rights, specifically the morality and ethics, moral theories, integrity, human rights and bioethics principles, required for a Clinical Technologist to function independently in the healthcare fraternity and to demonstrate the ability to work in medical and business practice contexts from a framework of medical law, bioethics and human rights. (Total notional time: 60 hours)

MOTOR LEARNING AND HUMAN DEVELOPMENT I (MLH116P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module provides the student a fundamental understanding of how motor development affects motor learning. Students will be introduced to the individual functional and structural constraints present in childhood and adolescence in addition to the motor skills developed during childhood. The purpose of this module is to enable students to prepare, develop and implement developmentally appropriate movement programs. (Total notional time: 60 hours)

N

NUTRITION I (NUT105P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Hospitality Management)

An introduction to the core nutrients that are recommended to maintain good health, to ensure the application of appropriate nutritional knowledge in the design of training programmes and the provision of advice on nutrition, health and exercise. (Total notional time: 120 hours)

O

ORTHOPAEDICS I (ORT206P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

The student will be able to apply his/her knowledge of head, neck, shoulder, arm, wrist, chest, lower back, hip, knee, lower leg and foot injuries in assessment and exercise prescription. A detailed understanding of injury classification, causes and treatment will be learnt. Students will be able to demonstrate an ability to define, classify and differentiate injuries sustained at the various regions of the body. Group-based activity, independent reading and case study discussions will facilitate innovative thinking. The module will allow the students an opportunity to enhance their knowledge in injury classification, which will form the basis of physical assessment and orthopaedic exercise programme prescription. (Total notional time: 120 hours)

ORTHOPAEDICS II (ORT307P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This prepares the student to have a detailed understanding of the initial musculoskeletal evaluation process, goals and principles in exercise rehabilitation. The student will be able to apply his/her knowledge of goals and principles in exercise based rehabilitation. The structure and principles of developing a rehabilitation exercise programme, gym programme and initial assessment will form the basis of knowledge in this module. (Total notional time: 180 hours)

ORTHOPAEDICS III (ORT408P) **1 X 3-HOUR PAPER AND PRACTICAL EXAMINATION**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module prepares the student to evaluate and prescribe individualised exercise programmes for multiple orthopaedic injuries. The student will be able to apply his/her knowledge of evaluation and prescription of exercise based rehabilitation programmes for multiple orthopaedic injuries. The module will provide the students with a hands-on practical experience at the various biokinetic facilities, which would facilitate learning in orthopaedic assessment and exercise prescription for multiple orthopaedic injuries. Students will be based at clinical sites, conducting orthopaedic assessments and prescribing exercises for injuries to the spine, shoulder, elbow, wrist, pelvis, knee, lower leg and ankle under supervision. Students will be exposed to corporate wellness tests and exercise prescription relevant to the corporate sector. (Total notional time: 120 hours)

P

PATHOPHYSIOLOGY I (PTP206P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module prepares the student to improve clinical understanding and reasoning in the field of pathophysiology within the scope of practice of Biokinetics while emphasising how the essential concepts of pathophysiology are immediately relevant to the practice of Biokinetics. The Biokinetics student will have a clinical background of pathology and disease progression. A student will learn basic anatomy of the relevant system, aetiology, and pathophysiology of disease progression. (Total notional time: 120 hours)

PATHOPHYSIOLOGY OF CHRONIC DISEASES II (PCD307P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module prepares the student to improve clinical understanding and reasoning in the field of pathophysiology and certain chronic diseases within the scope of practice of Biokinetics, while emphasising how the essential concepts of pathophysiology associated with the said chronic disease is managed in the practice of Biokinetics. (Total notional time: 180 hours)

PATHOPHYSIOLOGY OF CHRONIC DISEASES III (PCD408P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module prepares the student to improve clinical understanding and reasoning in the field of pathophysiology and certain chronic diseases within the scope of practice of Biokinetics, while emphasising how the essential concepts of pathophysiology associated with the said chronic disease is managed in the practice of Biokinetics. (Total notional time: 120 hours)

PHARMACOLOGY (PMY315P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Pharmaceutical Sciences)

This module introduces the student to pharmacological principles and concepts related to drug administration, drug scheduling, legal aspects and drug allergies. Upon completion, the student will be able to demonstrate the basic competencies such as drug calculation, application of drug abbreviations and the listing of common drug side- and adverse effects and the supplication of the ethical and legal aspects. (Total notional time: 60 hours)

PROFESSIONAL STANDARDS AND ETHICS (PSE418P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module prepares the student within the field of Biokinetics to implement and manage health policy, health systems, and structures, capacity building and interdisciplinary healthcare as required in South African legislation. Apply basic management functions and competencies in private and public Biokinetics practice/ health care facility contexts. The module should enable the student to apply relevant knowledge and understanding of the scope of practice and ethical rules concerning Biokinetics. To be able to apply entrepreneurial skills in establishing and managing a Biokinetics practice. The student should also demonstrate a systematic knowledge base and implementation skills of health related ethical and legal aspects within the profession of Biokinetics. This module equips students to implement public health policies, relevant legislative obligations, general practices according to human rights principles and the constitution. Students should also be able to manage the practice/facility with due consideration for and in collaboration / conjunction with policy makers. (Total notional time: 60 hours)

R

RESEARCH PRINCIPLES I (RPR115P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module prepares the student to utilise research in investigating Biokinetics problems. The student will be able to apply his/her knowledge of research to the clinical areas of biokinetics with reference to the introduction to research, the research process, ethics and finding information. Upon completion, the student will be able to demonstrate knowledge, comprehension and application of research understanding when providing evidence-based care; to demonstrate guided response in gaining the skill of academic reading, use of academic writing skills in writing assignment including citing and proper referencing using appropriate referencing style. (Total notional time: 60 hours)

RESEARCH PRINCIPLES II (RPR216P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module teaches the student how to use the research principles learned in the first level in a more realistic and programme specific effect. The theory of research is dealt with in preparation for the student to write a research proposal in his fourth year. The student will be able to recognise different profession specific topics and argue the validity of the topics. The research process and protocol will be taught to enable the student to become a researcher. (Total notional time: 120 hours)

RESEARCH PROJECT (RBK408P) **PROJECT ASSESSMENT**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module prepares the student to be an independent practitioners and researchers in the industry of Biokinetics. The purpose of this module is to provide the student with an excellent opportunity to implement ideas and knowledge gathered in theory and practical courses and conduct, supervised research in the field of Biokinetics. (Total notional time: 300 hours)

W

WORK-INTEGRATED LEARNING I (WBK307P) **WORK-INTEGRATED LEARNING**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

The module will provide the students with a hands-on practical experience at the various Biokinetics facilities, which would facilitate learning in exercise testing, evaluation and prescription for multiple chronic/orthopaedic conditions. Students will be based at clinical sites, conducting cardiac-; metabolic-; pulmonary-; immunological-; orthopaedic-; neuromuscular-; cognitive- and special population exercise testing and prescription under supervision. Furthermore, they will conduct orthopaedic assessments and prescribe exercises for injuries to the spine, shoulder, elbow, wrist, pelvis, knee, lower leg and ankle, under supervision. (Total notional time: 180 hours)

WORK-INTEGRATED LEARNING II (WBK408P) **WORK-INTEGRATED LEARNING**

(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

This module prepares the student to understand the practical application of exercise in preventing or delaying onset of chronic diseases. It also focuses on practical methods of exercise management of healthy persons as well as individuals with pathologies, the use (application) of fundamental principle of exercise physiology in clinical settings to minimise the risk of chronic diseases associated with physical inactivity and to manage those already affected. The students will be exposed to the practical application of Biokinetics practices in community, corporate, commercial, institutional fitness, wellness centres, nursing homes, senior citizens centres and hospitals. (Total notional time: 360 hours)