2023
HANDBOOK

DUT
DURBAN UNIVERSITY OF TECHNOLOGY
INYUVESI YASETHEKWINI YEZOBUCHWEPHESHE

FACULTY OF HEALTH SCIENCES

BASIC MEDICAL SCIENCES

HANDBOOK FOR 2023

FACULTY of HEALTH SCIENCES

DEPARTMENT of
BASIC MEDICAL SCIENCES

The Department of Basic Medical Sciences is a specialist department servicing programmes primarily in the Faculty of Health Sciences.
This Department does not offer any programmes.

Modules are offered in the following disciplines:
Anatomy
Epidemiology
Pathology
Pharmacology
Physiology

This handbook offers information on these modules.

WHAT IS A UNIVERSITY OF TECHNOLOGY?

A university of technology is characterised by being research informed rather than research driven where the focus is on strategic and applied research that can be translated into professional practice. Furthermore, research output is commercialised, thus providing a source of income for the institution. Learning programmes, in which the emphasis on technological capability is as important as cognitive skills, are developed around graduate profiles as defined by industry and the professions.

NOTE TO ALL REGISTERED STUDENTS

Your registration is in accordance with all current rules of the Institution. If, for whatever reason, you do not register consecutively for every year/semester of your programme, your existing registration contract with the Institution will cease. Your re-registration anytime thereafter will be at the discretion of the institution and, if permitted, will be in accordance with the rules applicable at that time.

IMPORTANT NOTICES

The rules in this departmental handbook must be read in conjunction with the General Rules (G Rules) contained in the Durban University of Technology (DUT) General Handbook for Students as well as the relevant module Study Guides.

Your attention is specifically drawn to Rule G1 (8), and to the process of dealing with student issues.

FACULTY VISION, MISSION, GOALS & VALUES

VISION

"Leading transformative and innovative Health Sciences education"

MISSION

"Developing holistic professionals responsive to healthcare needs, "through excellence in:

- Teaching and learning
- Research, Innovation and Engagement
- Fostering Entrepreneurship

VALUES

PROFESSIONALISM

To work within the regulatory framework of professional conduct.

To maintain and develop professional expertise and good work ethic.

INTEGRITY

To conduct ourselves with strong moral principles.

To be honest and authentic. To do what is ethical and just.

UBUNTU

To treat people with respect, fairness courtesy, politeness, and kindness.

TRANSPARENCY
To conduct ourselves with openness and honesty through shared governance.
ACCOUNTABILITY
To accept responsibility for one's actions.

DERPARTMENTAL VISION, MISSION, GOALS & VALUES

Vision
To be a leading provider of Basic Medical Science education and research
Mission
Making sense of the human body:
Building the foundation for future health professionals
Values
1. Behaviour
To uphold and promote professionalism, integrity and ethics.
To be responsible and accountable.
2. Mutual Respect
To embrace the principles of uBuntu that represent our humanity and community: kindness, empathy, sensitivity and caring.
3. Student Centeredness
To provide high quality teaching, learning and assessment incorporating innovative strategies to address the distinct learning needs of our student.

CONTENTS

1. DEPARTMENTAL AND FACULTY CONTACT DETAILS

All departmental enquiries to:

Secretary:	Miss N Manyathi
Tel No:	(031)373 2406
Email:	nondumisom@dut.ac.za
Location of Department:	Department of Basic Medical Sciences, Gate 6, Steve Biko Road, Mansfield Site Area, Ritson Campus

Head of Department	Prof JD Pillay
Tel No:	(031) 373 2398
Fax No:	(0866)741111
Email:	pillayjd@dut.ac.za
Location of Department:	Department of Basic Medical Sciences, Gate 6, Steve Biko Road, Mansfield Site Area, Ritson Campus

All Faculty enquiries to:

Faculty Officer:	Mrs FT Mayisela
Tel No:	(031) 373 2701
Email:	thembim@dut.ac.za
Location:	Health Sciences Faculty Office, Gate 8, Steve Biko Road, Mansfield Site Area, Ritson Campus

Executive Dean:	Prof GG Mchunu
Executive Dean's Secretary	Mrs Bilkish Khan
Tel No:	(031) 373 2704
Email:	bilkishk@dut.ac.za
Location:	Executive Dean's Office, Gate 8, Steve Biko Road, Mansfield Site Area, Ritson Campus

2. STAFFING	Name and Qualification
Full Professors	Prof L Skaal, DrPH (Social and Behavioural Studies); MPH (Social and Behavioural Studies), BSc (Physiotherapy), Cert: HE (Assessment and Moderator Evaluation)
Associate Professors	Prof F Haffejee, PhD (Optics & Imaging - Medicine) (UKZN); MSc (UKZN); BSc (Hons) (UDW); BSc (UN)
Senior Lecturers	Dr F Ally, PhD (Anatomy) (UKZN); MEd (Higher Ed) (UKZN); HDE (Postschool) (UN); BMedSc (Hons) (UDW)
	Dr N Govender, PhD (Optics & Imaging - Medicine) (UKZN); MSc (UDW); BSc (Hons) (UDW); BSc (UDW)
	Dr Y Thandar, PhD (Pharm.) (UKZN), MMedSc (ClinPharm) (UDW); BPharm (UDW)
Lecturers	Dr AK Bhundoo, MTech (Chiropractic) (DUT)
	Mrs JF Ducray, MMedSc (UKZN); BMedSc (Hons) (WITS); BSc (WITS)
	Dr CM Kell, MTech (Hom) (DUT); PGCE (UNISA)
	Mrs BO Mbhele, MMedSc (UKZN); BMedSc (Hons)(UKZN); BSc (BiolSc)(UKZN)
Senior Technicians	Mr AM Mkhize, MTech (Biotechnology); BTech (ML Sultan); BSc (Univ. Zululand)
Technicians	Ms Y Padayachee, BSc (RU)
	Dr GM Zondi, MTech (Homoeopathy) (DUT)
Technical Assistant	Mr S Ninela
Laboratory Assistant	Vacant
Secretary	Miss N Manyathi, MMHRM1 (Masters DUT) B.Tech (HR) (DUT); ND (HR) (DUT)

3. DEPARTMENTAL INFORMATION & RULES

3.1 Programmes serviced by the Department

Programmes serviced	Qualification code	SAQA NLRD number
BHSc: Clinical Technology	BHCLT1	96409
BHSc: Chiropractic	BACHR1	96409
BHSc: Emergency Medical Care and Rescue	BHEMC1	72207
BHSc: Environmental Health	BHEVH1	74471
BHSc: Homoeopathy	BHHOM1	74471
BHSc: Medical Laboratory Science	BHMLS1	94553
BHSc: Medical Orthotics and Prosthetics	BHMOP3	91786
BHSc: Nursing Science	BCHNSG/E	76925
BHSc: Radiography: Diagnostic Radiography	BHDRD1	94832
BHSc: Radiography: Diagnostic Sonography	BHDSN1	94679
BHSc: Radiography: Nuclear Medicine	BHNMD1	94803
BHSc: Radiography: Radiotherapy	BHRDT1	94800
D: Somatology	DISOM1	99725
HC: Dental Assisting	HCDNA1	66412

3.2 MODULES OFFERED BY THE DEPARTMENT

Refer to 6. Modules and content per programme

3.3 DEPARTMENTAL INFORMATION

3.3.1. Academic Integrity

Please refer to the General Rules pertaining to academic integrity G13 (1) (o). These will be enforced wherever necessary to safeguard the quality of our qualifications, and the integrity of the Faculty of Health Sciences at the DUT.

3.3.2. Code of Conduct for Students

In addition to the General Rules pertaining to Student Conduct SR3 (3), a professional code of conduct pertaining to behaviour, appearance, personal hygiene and dress shall apply to all students registered within the Faculty of Health Sciences, at all times.

Students registered in the department will be required to adhere to the dress code as determined by the Head of Department.

Students must adhere to all Health and Safety regulations both at DUT's Wentworth Hospital teaching facility, all DUT campuses and in clinical placement sites. Failure to do so will be treated as a breach of discipline.

3.3.3. Uniforms

Students must adhere to instructions regarding specific uniforms required during practical sessions. Refer to your Study Guide for more details.

3.3.4 Health and Safety

Students must adhere to all Health and Safety regulations both while at DUT and in Work Integrated Learning (WIL) placements. Failure to do so will be treated as a breach of discipline. Refer to your Study Guide for more details.

3.3.5 Attendance

Students are encouraged to achieve 100% attendance for all planned academic activities as these are designed to provide optimal support for the required competency. Where absence is unavoidable, the student must timeously advise the department of the reason. Only exceptional reasons will be condoned. Poor attendance records may lead to penalties.

A register of attendance will be circulated during each lecture and practical. It is the responsibility of all students to sign the register personally during these sessions. In the case of online sessions delivered via Microsoft Teams, a register will be downloaded at the start and the end of the session.

Consult your module Scheme of Work for the dates of the assessments. Absence from these assessments will not be condoned without a valid reason (and proof thereof). These assessments collectively constitute the module course (final) mark.

Assignments and short assessments may also be conducted as determined by the lecturers and marks from these assessments may contribute towards the course (final) mark.

3.3.6 General Information for Anatomy Dissection Hall

3.3.6.1. Under no circumstances may unauthorised persons (persons not registered for Anatomy) enter. Disciplinary action will be taken against anyone flouting this rule.

3.3.6.2. Cadavers and all human materials must be treated with utmost respect.

3.3.6.3. All students must be appropriately dressed. White lab coats and closed shoes (e.g. takkies) are compulsory.

3.3.6.4. Smoking, drinking and eating are strictly prohibited.

3.3.6.5. Each cadaver has 2 stainless steel tags attached (ear and small toe). Do not remove these tags.

3.3.6.6. Do not cut or tear the plastic used to cover cadavers.

3.3.6.7. Buckets at the base of the table are for collecting body fluids only and not for waste paper, scalpel blades, etc. Specific bins are provided for the disposal of wastepaper, scalpel blades, etc.

3.3.6.8. Do not leave scalpel, forceps, etc. on the tables or in the cadaver.

3.3.6.9. Keep tables clean at all times.

3.3.6.10. Do not drop pieces of human material on the floor. Place all off-cuts into bowls provided.

3.3.6.11. A bowl is provided at each dissection table for human material only. Please refrain from placing paper towels, scalpel, blades, etc. into these receptacles.
3.3.6.12. Do not dispose of paper towels, scalpel blades, etc. into bins specifically provided for human material.
3.3.6.13. As far as possible do not discard skin. Use it to cover the cadaver. These are best to prevent dehydration.
3.3.6.14. After each session of dissection cover the cadavers appropriately.
3.3.6.15. Use the fluids provided in sprays to keep cadavers moist.
3.3.6.16. Disposal procedures to be adhered to in the Anatomy laboratory are as follows:

- All cadaveric material to be placed in bins provided for each table
- Used and broken scalpel blades must be placed in the Sharps containers provided
- Used gloves to be discarded in the Glove disposal boxes provided in each lab
- Wastepaper and paper towels must be disposed of in the black bins located at/near the sinks

3.3.6.17. Report injuries to the staff present immediately

3.3.7 General Laboratory Information

3.3.7.1. No student is allowed in the laboratory unless a staff member is present.
3.3.7.2. Any student without a laboratory coat will NOT be admitted into the laboratory.
3.3.7.3. Closed shoes must be worn at all times – especially when dissecting equipment is in use.
3.3.7.4. No eating, drinking or smoking is allowed in the laboratory.
3.3.7.5. All cuts and sores must be covered.
3.3.7.6. Appropriate behaviour is expected at all times.
3.3.7.7. Each student will be allocated a bench space/work station for the year. It is the responsibility of the students to check their stations BEFORE the commencement of each practical session and to report any discrepancies immediately to a staff member. This pertains particularly to microscopes and slides.
3.3.7.8. Any breakages will be charged to the student responsible. The combined class will share the cost if the person responsible for the damage is not identified.
3.3.7.9. Students are not permitted into the preparation room or wash up room.
3.3.7.10. Students are responsible for keeping their workstations clean and tidy.
3.3.7.11. Microscopes must be handled and stored correctly after use. You will be advised on these procedures. Any mishandling of equipment could result in a student being denied access to the laboratory for the remainder of the year/course.
3.3.7.12. Practical sessions will begin promptly at the scheduled times. Students arriving late will not be admitted into the laboratory.
3.3.7.13. Report injuries to a staff member immediately.

4. DEPARTMENTAL RULES

These rules apply to all students registered for modules offered by this Department.

4.1 Special Assessments and Condonements

No missed assessments will be condoned.

- Due to COVID-19 related restricts some assessment might have to be undertaken virtually. In addition, some summative assessments might also have to be changed to continuous assessment methods. Clarity on the nature of assessments will be communicated to students upon receipt of relevant decisions from university management.

- If a student misses an assessment for reasons of illness, a special assessment may be granted if the student provides a valid medical certificate specifying the nature and duration of the illness, and a declaration that for health reasons it was impossible for the student to sit for the assessment. This certificate must be submitted to the module lecturer no later than two (2) working days after the "fit for duty" date on the medical certificate.
- If a student misses an assessment for reasons other than illness, a special assessment may be granted if the student provides a valid notification that for unavoidable reasons it was impossible for the student to sit for the assessment. This must be submitted to the module lecturer no later than two (2) working days after that date of the missed assessment.
- Any student who misses an assessment and who does not qualify for a special assessment, and any student who qualifies for a special assessment but fails to write it, shall be awarded a zero (0) mark for the missed assessment.

4.2 Student Appeals

Rule G1 (8) refers to:

Any student wishing to appeal against:

(a) The implementation of an Institutional Rule must do so in the first instance to the relevant Head of Department;

(b) The decision of a Head of Department must do so via the relevant Executive Dean to the Faculty Board or a delegated Committee of the Faculty Board. The decision of the Faculty Board or a delegated Committee of the Faculty Board is final, and no further appeals will be considered thereafter
(*Amended w.e.f. 2009/01)*

5. BOOKLIST - PRESCRIBED TEXTBOOKS FOR 2022

(The student must obtain the prescribed textbooks, and should consult the recommended textbooks)

Authors Name	Course	Title	Date of Publication	Library Copies
Gosling, Harris, Whitemore, Wiiliam	Homoeo/Chiro (Anatomy I, II)	Human Anatomy Atlas & Text	Latest Edition	I

Crossman, A.R.; Neary, D	MOP/Homoeo/ Chiro- (2nd yr. only) (Anatomy II-Clin Anat)	Neuroanatomy, An illustrated colour text Churchill Livingston	Latest Edition	**1**
Moore. K L	Homoeo/Chiro (Anatomy I, II)	Clinically Oriented Anatomy Williams and Wilkens, Baltimore	Latest Edition	**2**
Wheater, et al.	Homoeo/Chiro/ (Anatomy I) (Physio I, II)	Functional Histology: A text and colour Atlas Churchill	Latest edition	**1**
Penny Webb, Chris Bain & Sandi Pirozzo	Homoeo/Chiro (Epi II)	Essential Epidemiology edition	Latest edition	**4**
C.J. Finlayson & B.A.T. Nevel	Homoeo/Chiro III (Pathology)	Pathology at a Glance	Latest edition	**5**
Dreyer A, Kharwa R, Moch, S and Thandar Y	Homoeo/Chiro/ Clin Tech./EMC/ Postgrad & Nursing Science (Pharmacology)	Pharmacology for Nurses and Pharmacology for Health Sciences	4th edition	**3**
Tortora, G.J. & Derrickson, B.	Food & Consumer Science/Medical Laboratory Science/Nursing Science/Soma I/ /MOP/Clin Tech I/ Homoeo/Chiro/ EH/EMC (Physiology 1)	Introduction to the Human Body	Latest edition	**4**
Tortora, G.J., Derrickson, B	Radiography (Physiology 1)	Principles of Anatomy and Physiology	Latest edition	**2**
Keith L. Moore, Anne M.R. Agur	MOP/Clin Tech/EMC I/ Radiography (Anatomy 1)	Essential Clinical Anatomy	Latest Edition	**2**
Derrickson, B	EMC II/ Homoeo/Chiro II (Physio 2)	Human Physiology	Latest Edition	**1**
McKinney & Woodman	Homoeo/Chiro (Pathology)	Pathology -Crash course	5th edition	**1**

6. MODULES AND ASSESSMENTS PER PROGRAMME

NB: Students are required to read this section in conjunction with the relevant study guide.
(CA: Continuous Assessment)

6.1 BACHELOR OF HEALTH SCIENCES: CLINICAL TECHNOLOGY

MODULE (CODE)	LEARNING AREAS/CONTENT	ASSESSMENT PLAN
Anatomy AAMY101	Introduction to Anatomy Thorax Abdomen and Pelvis Limbs and Back Neuroanatomy Head and Neck	CA
Physiology PYSL101	Introduction Nervous System Cardiovascular System Respiratory System Renal System Cardiovascular system Lymphatic & Immunity Reproductive System Gastro-intestinal system	CA

6.2 BACHELOR OF HEALTH SCIENCES: CHIROPRACTIC

MODULE (CODE)	LEARNING AREAS/CONTENT	ASSESSMENT PLAN
Gross Anatomy IA ANGR111	Introduction to Anatomy Thorax	CA
Gross Anatomy IB ANGR121	Abdomen Pelvis	CA
Histology HIST111	Introduction to Histology Primary Tissues: including epithelia, connective tissues (Binding tissues, blood, cartilage and bone), muscle and nervous tissue Histology of the Body Systems including cardiovascular, integumentary, lymphatic organs, respiratory, digestive, urinary, endocrine & reproductive	CA
Physiology IA PHGY111	The Human Body The Chemical level of organisation: Basic Chemistry The Cellular level of organisation The Integumentary System: Skin and membranes The Muscular System The Nervous System Special Senses	CA
Physiology IB PHGY121	The Endocrine System The Cardiovascular System The Lymphatic System and Body Defences The Respiratory System The Digestive System The Urinary System The Reproductive System	CA
Biological Sciences BIOS101	The scope of biology, characteristics of cells, Multicellular organisation, Energy transformation and nutrient procurement, Gaseous exchange, Internal transport, Cellular reproduction and inheritance, Reproduction and development, Evolution, Ecology, Origin of life, viruses and monera, The Protistan Kingdom, The Plant Kingdom, The Fungal Kingdom, The Animal Kingdom. The scope of microbiology. Characteristics and types of bacteria. Characteristics of protozoa, Yeasts and moulds. Laboratory study of bacteria. Characteristics of Rickettsaie, Chlamydaie and Mycoplasmas. Characteristics of viruses. General bacterial physiology. Micro-organisms in the ecological system. Basic principles of sterilization and disinfection. Antimicrobial agents and chemotherapy.	CA
Gross Anatomy II ANGR201	Back Upper Limb Lower Limb	CA
Clinical Anatomy ANGR221	Neuroanatomy Head & Neck Applied Anatomy	CA
Physiology IIA	The Neuro-endocrine System	CA

PHGG201	The Cardiorespiratory System	
Physiology IIB PHGY201	The Genitourinary system	CA
Immunology, Parasitology and Communicable Diseases EPIP201	Parasitology Immunology Communicable Diseases	CA
General Pathology GEPA201	Introduction to Pathology and Disease Cell injury, death and necrosis Amyloid Calcification Pigmentation Jaundice Oedema, fluid and electrolyte imbalance; Hyperaemia, congestion, haemorrhage, thrombosis, embolism, infarction Inflammation, healing and repair; Infection and disease Disorders of Growth and cancers; Effects of Radiation Disorders of Carbohydrate metabolism; Nutritional disorders Autoimmune disorders	CA
Systemic Pathology IA SYSP311	Skin Cardiovascular System Haematopoietic and Lymphoid Systems; Respiratory System Renal System	CA
Systemic Pathology IB SYSP321	Gastrointestinal Tract & Liver, Pancreas & Biliary Tract Musculoskeletal System The Nervous System; Endocrine System The reproductive system	CA

6.3 BACHELOR OF HEALTH SCIENCES: HOMOEOPATHY

MODULE (CODE)	LEARNING AREAS/CONTENT	ASSESSMENT PLAN
Gross Anatomy Module A GRAN101	Introduction to Anatomy Thorax	CA
Gross Anatomy Module B GRAN102	Abdomen Pelvis	CA
Histology HSTL101	Introduction to Histology Primary Tissues: including epithelia, connective tissues (Binding tissues, blood, cartilage and bone), muscle and nervous tissue Histology of the Body Systems including cardiovascular, integumentary, lymphatic organs, respiratory, digestive, urinary, endocrine & reproductive	CA
Anatomy II Gross GRAN201	Back Upper Limb Lower Limb	CA
Anatomy II Clinical CLAN101	Neuroanatomy Head & Neck Applied Anatomy	CA
Epidemiology II EPIP101	Immunology Parasitology Communicable Diseases	CA
Epidemiology II EPPH101	Public Health	CA
General Pathology II	Introduction to Pathology and Disease	CA

GPAT101	Cell injury, death and necrosis Amyloid Calcification Pigmentation Jaundice Oedema, fluid and electrolyte imbalance; Hyperaemia, congestion, haemorrhage, thrombosis, embolism, infarction Inflammation, healing and repair; Infection and disease Disorders of Growth and cancers; Effects of Radiation Disorders of Carbohydrate metabolism; Nutritional disorders Autoimmune disorders	
Physiology IA PHSY102	The Human Body The Chemical level of organisation: Basic Chemistry The Cellular level of organisation The Integumentary System: Skin and membranes The Muscular System The Nervous System Special Senses	CA
Physiology IB PHSY103	The Endocrine System The Cardiovascular System The Lymphatic System and Body Defences The Respiratory System The Digestive System The Urinary System The Reproductive System	CA
Physiology IIA	The Neuro-endocrine System The Cardiorespiratory System	CA
Physiology IIB PHGU201	Genitourinary System	CA
Systematic Pathology II Module I SYPT101	Skin Cardiovascular System Haematopoietic and Lymphoid Systems; Respiratory System Renal System	CA
Systemic Pathology Module II SYPT102	Gastrointestinal Tract & Liver, Pancreas & Biliary Tract Musculoskeletal System The Nervous System; Endocrine System The reproductive system	CA
Pharmacology PHYC102	General Aspects of Drug Therapy; Pharmacokinetics and Pharmacodynamics Administration of drugs to patients Adverse effects of drugs Drugs affecting the autonomic, somatic and sensory nervous system Central nervous system Haemopoietic system Respiratory system Digestive tract Analgesics and anti-inflammatory drugs Antihistamines Hormones and hormone antagonists Antimicrobial and other anti-infective drugs Cardiovascular drugs Poisoning and drug treatment in emergencies	CA
Biological Principles I BLGP101	The scope of biology, characteristics of cells, Multicellular organisation, Energy transformation and nutrient procurement, Gaseous exchange, Internal transport, Cellular reproduction and inheritance,	CA

	Reproduction and development, Evolution, Ecology, Origin of life, viruses and monera, The Protistan Kingdom, The Plant Kingdom, The Fungal Kingdom, The Animal Kingdom. The scope of microbiology. Characteristics and types of bacteria. Characteristics of protozoa, Yeasts and moulds. Laboratory study of bacteria. Characteristics of Rickettsaie, Chlamydaie and Mycoplasmas. Characteristics of viruses. General bacterial physiology. Micro-organisms in the ecological system. Basic principles of sterilization and disinfection. Antimicrobial agents and chemotherapy.	

6.4 BACHELOR OF HEALTH SCIENCES: MEDICAL LABORATORY SCIENCES

MODULE (CODE)	LEARNING AREAS/CONTENT	ASSESSMENT PLAN
Anatomy & Physiology IA ANPA 102	Organization and functions of all systems of the human body; Homeostatic mechanisms Structure and function of cellular organelles, including the causes and cellular basis of cancer Body tissues, including epithelial, connective, muscle and nervous tissues The integumentary system The Neuro-endocrine systems	CA
Anatomy & Physiology IB ANPB 102	The Cardiovascular and respiratory systems; The digestive & urinary systems; Reproductive system	CA

6.5 BACHELOR OF HEALTH SCIENCES: EMERGENCY MEDICAL CARE

MODULE (CODE)	LEARNING AREAS/CONTENT	ASSESSMENT PLAN
Physiology I PHSLI01	Introduction Cells Tissues Nervous System Endocrine System Reproductive System Cardiovascular System Respiratory System Muscular System Digestive System Urinary System	CA
General Pathology GPTA101	Introduction to Pathology and Disease Cell injury, death and necrosis Amyloid Calcification Pigmentation Jaundice Oedema, fluid and electrolyte imbalance; Hyperaemia, congestion, haemorrhage, thrombosis, embolism, infarction Inflammation, healing and repair; Infection and disease Disorders of Growth and cancers; Effects of Radiation	CA

	Disorders of Carbohydrate metabolism; Nutritional disorders Autoimmune disorders	
Pharmacology I PHAR101	General Aspects of Drug Therapy Pharmacokinetics and Pharmacodynamics Administration of drugs to patients Adverse effects of drugs Drugs affecting the autonomic, somatic and sensory nervous system Central nervous system Haemopoietic system Respiratory system Digestive tract Analgesics and anti-inflammatory drugs Antihistamines Hormones and hormone antagonists Antimicrobial and other anti-infective drugs Cardiovascular drugs Poisoning and drug treatment in emergencies	CA
Anatomy I AAMY102	Introduction to Anatomy Thorax Abdomen and Pelvis Limbs and Back Neuroanatomy Head and Neck	CA
Physiology II A PSYA 201	The Neuro-endocrine System The Cardiorespiratory System	CA
Physiology II B PSYB 202	The Genitourinary System	CA

6.6 BACHELOR OF HEALTH SCIENCES: ENVIROMENTAL HEALTH

MODULE (CODE)	LEARNING AREAS/CONTENT	ASSESSMENT PLAN
Anatomy & Physiology ANPA101	Organisation of the body Homeostatic mechanisms Structure and function of cellular organelles, including the causes and cellular basis of cancer Body tissues, including epithelial, connective, muscle and nervous tissues The integumentary system The Neuro-Endocrine system	CA
Anatomy & Physiology ANPB102	The Cardiovascular and respiratory system The digestive & urinary systems Reproductive system	CA

6.7 BACHELOR OF HEALTH SCIENCES: MEDICAL ORTHOTICS & PROSTHETICS

MODULE (CODE)	LEARNING AREAS/CONTENT	ASSESSMENT PLAN
Anatomy I ANMY101	Introduction to Anatomy Musculoskeletal Anatomy Back, Upper limbs and Lower limbs.	CA
Anatomy II ANMY201	**Section A: Neck** –surface anatomy, superficial neck muscles, triangles of the neck, deep structures of the neck, root of the neck, cervical viscera, thyroid gland, parathyroid glands, facial planes, pharynx, larynx. **Section B: Head** – Osteology, the Face - muscles, neurovascular structures, lymphatic drainage, the Scalp, cranial fossae and foramina (self-study), the Orbit, parotid and Temporal regions, temporomandibular joint, oral region (self-study), salivary glands, nose and paranasal sinuses, ear (self-study). **Section C: Neuroanatomy –** Embryology, cerebral topography,	CA

	brainstem and spinal cord, cerebellum, thalamus, epithalamus and hypothalamus, reticular formation, visual, olfactory and limbic systems, cranial nerves, blood supply of the brain.	
Clinical Studies CLCS101	Inflammation, repair and healing. Inflammatory diseases. Degenerative diseases. Post traumatic conditions. Metabolic disorders. Circulatory disorders Amputations Post-traumatic osteoporosis Aseptic bone necrosis. Paralysis resulting from nerve lesions. Diseases of the pelvis and hip. Diseases of the knee. Diseases of the foot. Diseases of the shoulder, elbow and hand, limb deformities, skin disorders and wound repair	CA
Clinical Studies CLCS201	Nervous system disorders and diseases (child and adult)(CNS and PNS) including Polio, Cerebral palsy, paraplegia and quadriplegia, ataxia. Parkinson's disease. Spinal and thoracic deformities, scoliosis, kyphosis. Diseases of the spine. Circulatory disorders. Metabolic disorders. Tumors. Degenerative diseases. Burns. Fractures.`	CA
Physiology for MOP PYSL102	Organisation of the body Homeostatic mechanisms Structure and function of cellular organelles, including the causes and cellular basis of cancer Body tissues, including epithelial, connective, muscle and nervous tissues The Integumentary system, The Neuro-Endocrine system The cardiovascular system, immunity and the lymphatic system The respiratory system.	CA
Basic Pharmacology BPHY101	Basic pharmacology Pharmacodynamics; Pharmacokinetics Central nervous system Non-steroidal anti-inflammatory drugs Vaccines Cardiovascular system Haemopoietic system Respiratory system Gastro-intestinal tract Endocrinology Vitamins and mineral Anti-neoplastic drugs and immune suppressors Wound care Dermatology Poisoning and emergencies HIV/AIDS Anti-histamines.	CA

6.8 BACHELOR OF HEALTH SCIENCES: NURSING SCIENCE

MODULE (CODE)	LEARNING AREAS/CONTENT	ASSESSMENT PLAN
Introduction to Pharmacology INPH102	General aspects of drug therapy including scheduling and legislation Pharmacokinetics and Pharmacodynamics Adverse drug reactions including drug interactions	CA

	Administration of drugs to patients Autonomic Nervous System (Pharm)	
Pharmacology PHMC201	Infective diseases, antimicrobial and antiparasitic drugs Central nervous system drugs Drugs that affect the respiratory system Drugs that affect the cardiovascular system Analgesics and anti-inflammatory drugs Drugs that affect the digestive tract Drugs that affect the endocrine system Family planning and immunization Pharmacodynamics with ref to toxicity, adverse drug reactions and interactions, drugs in pregnancy, lactation, children and elderly; Adverse drug events and reporting mechanisms	CA
Primary Health Care IV PRHC401	General Aspects of Drug Therapy Pharmacokinetics and Pharmacodynamics Administration of drugs to patients Adverse effects of drugs Drugs affecting the autonomic, somatic and sensory nervous system Central nervous system Haemopoietic system Respiratory system Digestive tract Analgesics and anti-inflammatory drugs; Antihistamines Hormones and hormone antagonists Antimicrobial and other anti-infective drugs Cardiovascular drugs Poisoning and drug treatment in emergencies Cough /Emphysema Ulcers / Constipation / Diarrhea Poisoning and Emergency drug treatment	CA

6.9 BACHELOR OF HEALTH SCIENCES: RADIOGRAPHY

MODULE (CODE)	LEARNING AREAS/CONTENT	ASSESSMENT PLAN
Anatomy I ANTM101	Introduction to Anatomy Musculoskeletal Anatomy	CA
Anatomy II ANTM201	Thorax Abdomen and Pelvis Limbs and Back Neuroanatomy Head and Neck	CA
Physiology IA PYSA101	Introduction Nervous System Endocrine System	CA
Physiology IB PYSB101	Cardiovascular System Respiratory System Renal System Lymphatic & Immunity Reproductive System Gastro-intestinal system	CA

6.10 NATIONAL DIPLOMA: SOMATOLOGY

MODULE (CODE)	LEARNING AREAS/CONTENT	ASSESSMENT PLAN

Anatomy and Physiology for Somatology APHA101	Introduction to living organisms, Cell - cell metabolism, Tissues, Integumentary System, Muscular System, Skeletal System, Nervous System, Senses, Endocrine System	CA
Anatomy and Physiology for Somatology APHB101	Cardiovascular System, Blood, Heart & Vessels, Lymphatic System, Respiratory Systems., Digestive System, Urinary System, Reproductive System	CA
Disease Fundamentals DSFD101	Overview of disease processes and fundamental terminology. Disorders of cells and tissues, skin, bone, joints, muscles and pregnancy. Disorders in the neurological, digestive, endocrine, cardiovascular, lymphatic, immune, respiratory, renal and reproductive systems	CA
Basic Pharmacology I BSPH101	Introduction and basic pharmacology Care and control of Medicines Pharmacokinetics and Pharmacodynamics Male and Female Hormones and Contraceptives Topical Dermatologicals Drugs acting on the heart and blood Antimicrobials Drugs acting on the GIT Drugs acting on the CNS Drugs in endocrine disorders	CA

6.11 HIGHER CERTIFICATE: DENTAL ASSISTING

MODULE (CODE)	LEARNING AREAS/CONTENT	ASSESSMENT PLAN
Pharmacology for Dental Assisting PHDA101	Introduction to Pharmacology Terminology Pharmacokinetics Pharmacodynamics Analgesics Antimicrobials Sedative / hypnotics Miscellaneous Classes Drug Interactions Prescription Writing	CA