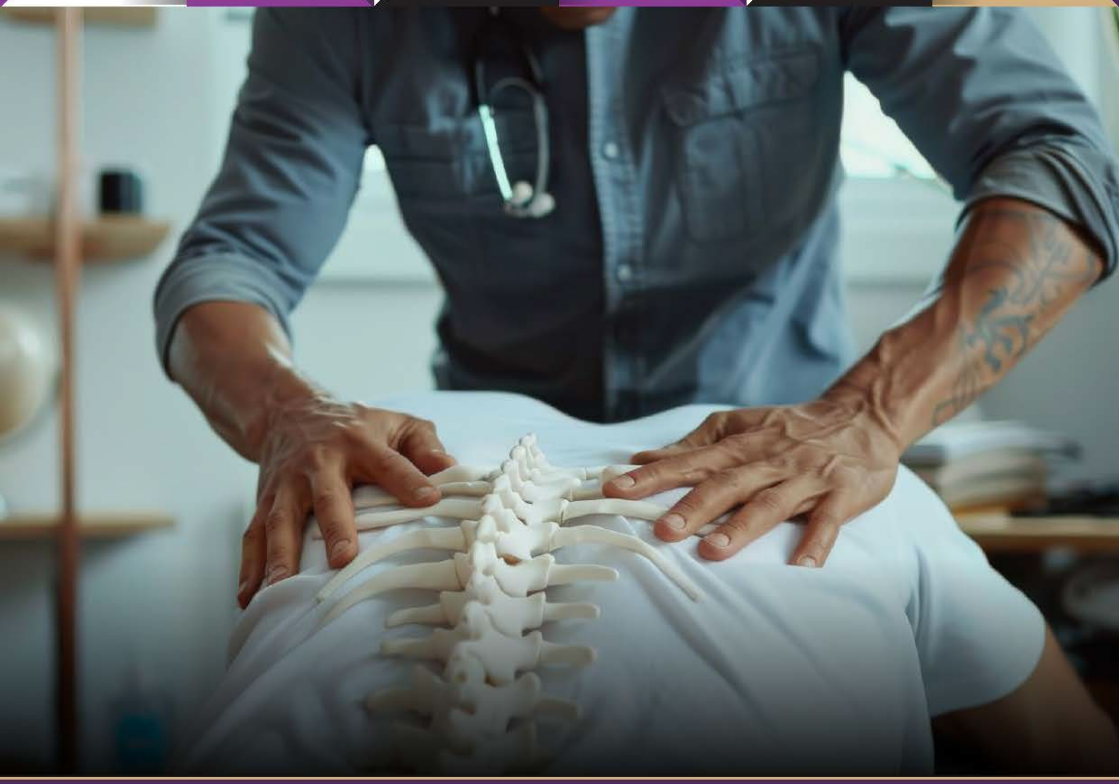

CHIROPRACTIC

DUT
DURBAN UNIVERSITY OF TECHNOLOGY
INYUVESI YASETHEKNINI YEZOBUCHWEPHESHE

FACULTY OF HEALTH SCIENCES

20 HAND 26 BOOK

HANDBOOK FOR 2026

FACULTY of HEALTH SCIENCES

DEPARTMENT of CHIROPRACTIC

What is a University of Technology?

A university of technology is characterized 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 commercialized 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. In terms of process and procedure in dealing with student issues, your attention is specifically drawn to Rule G1 (8).

(Included w.e.f. 2004/01)

FACULTY of HEALTH SCIENCES
FACULTY VISION, MISSION, GOALS AND 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 regulatory frameworks 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.)

DEPARTMENTAL MISSION and GOALS

CHIROPRACTIC PROGRAMME

Vision

Global Leaders in Chiropractic Education and Scholarship

Mission

"Developing Chiropractors for Holistic Neuro-Musculoskeletal Health Care"

Through

1. Evidence-based Teaching and Learning
2. Innovative Research
3. Responsive Engagement and Collaboration with Communities

Values

Professionalism

(To abide by professional and regulatory frameworks, ethics and good practices.)

Integrity

(To demonstrate qualities of good character and honesty.)

Accountability

(To be responsible and answerable for our choices, actions and behaviours.)

Transformation

(Being able to adapt to change in an evolving healthcare system)

uBuntu

(Respect, goodness and goodwill to all)

Chiropractic Cares

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1. DEPARTMENTAL & FACULTY CONTACT DETAILS

All Department queries to:

Secretary:	Ms Kershnee Pillay (Chiropractic)
Tel No:	(031) 373 2094
Email:	kershp@dut.ac.za / chiropractic@dut.ac.za
Location of Department	Department of Chiropractic, Room DG2207, Mansfield Site Area, Ritson Road Campus

All Faculty queries to:

Faculty Officer:	Mrs F Mayisela
Tel No:	(031) 373 2701
Email:	thembim@dut.ac.za
Location:	Health Sciences Faculty Office; Gate 8, Steve Biko Rd, Mansfield Site Area, Ritson Campus
Executive Dean:	Professor Gugu Mchunu
Executive Dean's Secretary:	Mrs Bilkish Khan
Tel No:	(031) 373 2704
Email:	bilkishk@dut.ac.za
Location:	Executive Dean's Office, DG 2208, Mansfield Site Area, Ritson Campus

2. STAFFING Name and Qualification

Head of Department Dr D. Varatharajullu, PhD: Health Sciences (DUT), MTech: Chiropractic (DUT), Adv. Dip.: Business Administration (DUT)
(Acting)

Senior Lecturers
Dr A. Docrat, MTech: Chiropractic (TN), M.Med.Sci (UKZN), PG.Dip (UT)
Dr C. Korporaal, MTech: Chiropractic (TN)
Dr L. O'Connor, MTech: Chiropractic (DIT)

Lecturers
Dr J. Shaik, MTech: Chiropractic (DUT), M.Med.Sci (UKZN)
Dr C. Prince, MTech: Chiropractic (DUT)
Dr Y. Venketsamy, MTech: Chiropractic (DUT), M.Phil: Biomedical Forensic Science (UCT)

Clinic Staff
Mrs L. Twiggs
Mrs A. Makhonsa (ND Office Management)

Finance Administrator Mrs W. Drake (ND Horticulture)

Secretary Ms K. Pillay, BTech Comm: Admin (MLS)

3. DEPARTMENTAL INFORMATION & RULES

3.1. QUALIFICATIONS OFFERED BY THE DEPARTMENT

Learning programmes are offered in this Department which will, upon successful completion, lead to the award of the following qualifications.

CHIROPRACTIC:			
Qualification	**Qualification Code**	**SAQA NLRD Number**	**Important Time lines**
MTech: Chiropractic	MTCHR1	72171	Not offered since 2020, last successive registration is 2024
DTech: Chiropractic	DTCHR1	72093	Not offered since 2020
BHSc: Chiropractic	BACHR1	101517	Approved and offered from 2020
MHSc: Chiropractic	MHSCR1	117033	Approved and offered from 2021
Doctor of Chiropractic	DRCHR1	968080	Approved and offered since 2022

NB: The B. Tech Chiropractic and the BHSc: Chiropractic degrees do not allow the graduate registration with the Professional Board of Chiropractic and Osteopathy under the Allied Health Professions Council. The graduate must continue and complete the M.Tech: Chiropractic or the MHSc: Chiropractic to be eligible to register with the Professional Board, in accordance with Act 63 of 1982 (as amended), with particular reference to Regulations R629, Government Gazette No 11221 of 31 March 1988.

(Amended w.e.f. 2021/01)

3.2 DEPARTMENTAL INFORMATION

3.2.1 Academic Integrity

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

(Amended w.e.f. 2021/01)

3.2.2 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 with the Faculty of Health Sciences, at all times. Conduct pertaining to a specific class, laboratory or clinic at the University, as set by a Department, shall apply to all students registered for the particular module(s).

(Amended w.e.f. 2021/01)

3.2.3 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 advise the department timeously of the reason. Only exceptional reasons will be accepted for absence from guest lectures, industry or field trips. Poor attendance records may lead to penalties.

(Amended w.e.f. 2021/01)

3.2.4 Health and Safety

Students must adhere to all Health and Safety regulations both while at DUT, in the Departmental Clinics, in Community engagement events, and in WIL placements. Failure to do so will be treated as a breach of discipline.

(Amended w.e.f. 2021/01)

3.2.5 Work Integrated Learning (WIL)

WIL or clinical practical work forms part of the programmes within the Chiropractic Department. In addition to Rule G28, the student must comply with the rules and regulations as set out in the relevant environment where they are placed.

(Amended w.e.f. 2021/01)

3.2.6 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 Executive Dean for the Faculty of Health Sciences 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. 2021/01)

3.2.7 International Accreditation

The Chiropractic Programme is internationally accredited by the European Council on Chiropractic Education (ECCE). The ECCE's mission is to establish standards of excellence in the education and training of chiropractors, as safe and competent primary contact practitioners (https://www.cce-europe.com/about-us.html). This accreditation ensures that the programme offered by DUT is aligned with international norms and standards.

4 CHIROPRACTIC PROGRAMME RULES

Note these rules are applicable to all programmes within the Chiropractic Department.

4.1 REGISTRATION

All registered students within the Chiropractic Department are required to register annually as student chiropractors with the Allied Health Professions Council of South Africa. This is required to be completed within two weeks of registration as a student with the programme. This is a constituted requirement of Act 63 of 1982 (as amended), with particular reference to Regulations R629, Government Gazette No 11221 of 31 March 1988. Consequences of failure to register could include non-registration as an intern once the MTech: Chiropractic/MHSc Chiropractic qualification is obtained.

(Amended w.e.f. 2021/01)

4.2 WORK DONE DURING THE YEAR/SEMESTER

1. The calculation of the year/semester mark for each module for the purpose of issuing a certificate in terms of Rule G12 is indicated within the syllabus of each module (Section11).
2. In addition to the general requirements for a year/semester mark as

stipulated in Rule G12, the requirements of G12 (2) shall include:

(i) Adequate attendance at lectures, tutorials, practical's and clinical sessions. Lecturers are under no obligation to repeat learning sessions or provide learning materials missed as a result of student absenteeism.

(ii) The compulsory attendance at all functions, organized outings and educational tours arranged by the Department.

(Amended w.e.f. 2004/01)

4.3 CONDUCT OF STUDENT IN LABORATORY AND CLINIC

Rules of conduct pertaining to a specific laboratory, as instituted by the Head of a Department, shall apply to all students registered for the particular module. Similarly, the rules pertaining to the Chiropractic Day Clinic as set out in the Clinic Manual or by official notice shall apply to all students completing WIL in the Clinic.

(Amended w.e.f. 1995/01)

4.4 STUDENT CONDUCT AND DRESS CODE

Students must at all times conduct themselves as professionals and dress accordingly. Students shall adhere to specific instructions by a Head of Department or delegated staff member regarding specific conduct or attire required during practical and clinic sessions (for specific rules please refer to the relevant Study Guide or Clinic Manual).

(Amended w.e.f. 1995/01)

4.5 EXAMINATIONS

1. The examination in each module shall consist of the theory and/or practical and/or oral examinations as indicated with the syllabus of each module published in this handbook (Section11).
2. All assessments shall be moderated either internally or externally depending on the NQF level in which they are offered (DUT Assessment Policy).
3. Marks obtained during an assessment may change according to the recommendations of the moderator.
4. The calculation of the final mark shall be according to Rule G12 and G13 except where the rules for a particular programme state otherwise.

(Amended w.e.f. 1995/01)

4.6 CLINICAL MODULES

Only students registered with the Chiropractic Department may register for modules offered by the Programme, except where such modules are also part of the homoeopathic curriculum.

(Amended w.e.f. 1998/01)

4.7 DISSERTATIONS

On submitting the bound copies of their research dissertation to the Faculty Research Officer, students shall at the same time hand to the Officer an abstract.

(Included w.e.f. 2000/01)

4.8 CLINIC MANUAL

The rules and guidelines of the Clinic Manual are binding on all persons referred to therein.

(Included w.e.f. 1996/01)

4.9 SPECIAL TESTS AND CONDONEMENT

A special test may be granted by the Head of Department / Head of Programme, to a student who has been prevented from taking a test:

1. by illness on the day of the test or immediately before it, provided that he/she submits a medical certificate on the form prescribed by the University, on which a medical practitioner, registered by the Health Professions Council of South Africa or homoeopath or chiropractor registered with The Allied Health Professions Council of South Africa, specifies the nature and duration of the illness and that for health reasons it was impossible or undesirable for the student to sit for the test, and that he/she submits such certificate to the lecturer/s concerned on the day as determined by the practitioner that the student should return to lectures immediately following such illness; or
2. by circumstances which in the opinion of the Head of Department / Head of Programme were beyond his/her control at the time of the test provided that satisfactory evidence of such circumstances is provided. Such circumstances shall not include:
   (i) any misinterpretation by him/her of the date, time or venue of the test;
   (ii) transportation difficulties.

   In addition, the Head of Department / Head of Programme may grant a special test to students with borderline academic results. The special test may take the form of an oral test, may be set at the end of the

period of registration, and may include a wider scope of work than the original test. A student who qualifies for a special test granted for borderline academic results, but fails to write it, or achieves lower than their original results, shall be awarded their original results.

Any student who misses an assessment and who does not qualify for a special test, and any student who qualifies for a special test but fails to write it, shall be awarded a zero mark for the missed assessment.

For the purpose of this rule "test" shall mean any written or oral test or practical, set for the purposes of determining or contributing towards a semester or year mark for the module, and shall include tests set for modules which are evaluated by continuous evaluation.
(Amended w.e.f. 2003/01)

4.10 STUDENT APPEALS

Rule G1 (8) of the DUT General Handbook applies.

5. BACHELORS OF HEALTH SCIENCES IN CHIROPRACTIC (BACHR1)

5.1 PROGRAMME INFORMATION

The Bachelor of Health Sciences in Chiropractic is a four-year professional degree registered by SAQA at NQF level 8 of the HEQSF. The degree replaces the National Diploma in Chiropractic and in addition to core modules, students will register for research modules and general education modules offered by both the faculty and the institution. Upon completion, the successful candidate may articulate into the Master of Health Sciences.

Further information about the programme is provided below:

5.1.1 Purpose of the Programme

Successful completion of the BHSc Chiropractic shall allow the graduate bachelor status but the holder will not be able to register as a chiropractic intern. This is a constituted requirement of the Allied Health Professions Act 63 of 1982 (as amended). Consequences of failure to comply with this requirement could include non-registration as a practitioner, once the MTech: Chiropractic/MHSc Chiropractic qualification is obtained.

(Amended w.e.f. 2021/01)

5.1.2 Duration of the programme

In accordance with the DUT Rule G23B (2)* and Rule G23B (3)*, the minimum duration of study is four (4) years, including any periods of clinical practice and the maximum duration will be six (6) years of registered study, including any periods of clinical practice.

(*Amended w.e.f. 2020/01*).

5.1.3 Assessment and moderation

The programme makes use of both summative examination modules and continuous assessment modules. As mentioned earlier on in this handbook, all assessments are moderated and the marks might change depending on the recommendations of the moderator.

5.1.3.1 Summative Assessments / Examinations

- The examination in each module shall consist of the theory and/or practical and/or oral examinations as indicated with the syllabus of each module published in this handbook.
- The calculation of the final mark shall be according to Rule G12 and G13 except where the rules for a particular programme state otherwise.

5.1.3.2 Continuous Assessments

These modules do not have a final examination. The results for these modules are determined through a weighted combination of assessments. As such, there are no supplementary examinations. Students are encouraged to work steadily through the period of registration in order to achieve the highest results possible.

- The assessment in each module shall consist of the theory and/or practical and/or oral assessments as indicated with the syllabus of each module published in this handbook.
- The calculation of the final mark shall be according to Study Guide for each module.

Assessment details are listed under each module at the back of this handbook (Section 11). Moderation follows the DUT requirements.

(Amended w.e.f. 2021/01)

5.1.4 Registration with the Professional Board

Within two weeks of registration with the Chiropractic Department, students are required to register as student chiropractors with the Allied Health Professions Council of South Africa (AHPCSA) in terms of the Allied Health Professional Act, 1982 (Act 63 of 1982) (Regulation R629, Government Gazette No 11221 of 31 March 1988). The registration will be facilitated by the department.

Successful completion of the BHSc: Chiropractic does not entitle the graduate to register with the AHPCSA or practice as a Chiropractor. The minimum qualification for registration is the M. Tech Chiropractic/MHSc: Chiropractic.
(Amended w.e.f. 2021/01)

5.1.5 Work Integrated Learning

The compulsory clinical practice component of this programme comprises:

- Scheduled attendance at the Chiropractic Day Clinic and completion of the clinical practical for Clinical Chiropractic and Biomechanics (CCHB411 / CCHB421). This needs to be performed in accordance with the Clinic Manual and Clinical Chiropractic and Biomechanics (CCHB411 / CCHB421) module study guide.

- Attendance at the Chiropractic Day Clinic and completion of the Observer Programme as outlined in the Clinic Manual and the module study guides. Students who have not completed the observer programme will not be allowed entry into the examinations for Clinical Chiropractic and Biomechanics II (CCHB421).

- Students must at all times conduct themselves as future professionals and dress accordingly. Students shall adhere to specific instructions by a Head of Department / Head of Programme regarding specific conduct or attire required during practical and clinic sessions (for specific rules please refer to the relevant Study Guide or Clinic Manual).
  (Amended w.e.f. 2020/01).

5.2 LEARNING PROGRAMME STRUCTURE

Year 1							
Study Period	**Module title**	**Module code**	**HESQF Level**	**SAQA Credit**	**C or E**	**Pre-requisite**	**Co-Requisite**
Year 1 Semester 1	Gross Anatomy IA	*ANGR111*	6	8	C	--	--
Year 1 Semester 1	Physiology IA	*PHGY111*	5	12	C	--	--
Year 1 Semester 1	Physics 101	*PHYS111*	5	8	C	--	--
Year 1 Semester 1	Biological sciences	*BIOS101*	5	16	C	--	--
Year 1 Semester 1	Cornerstone	*CSTN101*	6	12	C	--	--
Year 1 Semester 1	Philosophy and History of Medicine OR Contemporary Social Issues in SA	*PAHM101* *CSIC101*	6	12	E	--	--
Year 1 Semester 1	Issues of Gender and Society within Health Care OR isiZulu for Health Care Professionals I	*IGSH101* *IZHP101*	5	12	E	--	--
Year 1 Semester 2	Gross Anatomy IB	*ANGR121*	6	8	C	--	--
Year 1 Semester 2	Histology	*HIST111*	6	12	C	PHGY111	--
Year 1 Semester 2	Physiology IB	*PHGY121*	5	12	C	--	--
Year 1 Semester 2	Chemistry	*CHHC103*	5	12	C	--	--
Year 1 Semester 2	Physics 102	*PHYS121*	5	8	C	--	--
Year 1 Semester 2	Chiropractic Principles and Practice I	*CPPR111*	6	8	C	ANGR111	--
Year 1 Semester 2	Cultural diversity OR Information and Communication Technology Literacy and Skills	*CLDV101* *ICTL101*	5	8	E	--	--
Total credits				148			

Year 2							
Study Period	**Module title**	**Module code**	**HESQF Level**	**SAQA Credit**	**C or E**	**Pre-requisite**	**Co-Requisite**
Year 2 Semester 1	Sociology OR Leadership and supervisory development	*SLST211* *LDSD101*	7	12	E	--	--
Year 2 Semester 1	Gross Anatomy II	*ANGR201*	*6*	16	C	ANGR111 ANGR121	--
Year 2 Semester 1	Physiology IIA	*PHGG201*	*6*	12	C	PHGY111 PHGY121	--
Year 2 Semester 1	Biochemistry	*BCHY201*	*6*	8	C	CHHC103	--
Year 2 Semester 1	Immunology, Parasitology and Communicable Diseases	*EPIP201*	*6*	16	C	PHGY111 PHGY121 BIOS101	--
Year 2 Semester 2	Diagnostic Imaging I	*DGNT221*	*6*	8	C	--	--
Year 2 Semester 2	General Pathology	*GEPA201*	*6*	8	C	PHGG201	--
Year 2 Semester 2	Clinical Anatomy	*ANGR221*	*6*	16	C	--	--
Year 2 Semester 2	Physiology IIB	*PHGY201*	*6*	12	C	PHGY111 PHGY121	--
Year 2 Semester 2	Chiropractic Principles and Practice II	*CPPR211*	6	12	C	CPPR111 ANGR201	--
Year 2 Semester 2	Introduction to sign language OR Values in the workplace	*INSL101* *VWKP101*	5	8	E	--	--
Total credits				128			

Year 3							
Study Period	**Module title**	**Module code**	**HESQF Level**	**SAQA Credit**	**C or E**	**Pre-requisite**	**Co-Requisite**
Year 3 Semester 1	Chiropractic Principles and Practice IIIA	*CPPR311*	7	12	C	--	DINT311
Year 3 Semester 1	Diagnostics IA	*DINT311*	7	12	C	All first and second year modules (excl. GE modules)	SYSP311
Year 3 Semester 1	Systemic Pathology IA	*SYSP311*	7	12	C	--	DINT311
Year 3 Semester 1	Psychopathology	*PPTH301*	7	8	C	SLST211	--
**Year 3 Semester 1*	Clinical Pharmacology	*pending*	7	12	C		DINT311
Year 3 Semester 1	The Entrepreneurial edge	*TENE101*	6	8	E	--	--
Year 3 Semester 1	Constitutional Law and Human Rights OR Equality and Diversity	*CLHR101* *EQDV101*	6	8	E	--	--
Year 3 Semester 2	Diagnostics IB	*DINT321*	7	12	C	DINT311 SYSP311	--
Year 3 Semester 2	Clinical Chiropractic and Biomechanics I	*CCHB301*	7	12	C	DINT311 CPPR311	--
Year 3 Semester 2	Diagnostic Imaging II	*DGNT331*	7	12	C	--	--
Year 3 Semester 2	Chiropractic Principles and Practice IIIB	*CPPR321*	7	12	C	CPPR311	--
Year 3 Semester 2	Systemic Pathology IB	*SYSP321*	7	12	C	SYSP311 DINT311	--
Year 3 Semester 2	Myofascial and Adjunctive Therapies I	*MYAT311*	7	12	C	DINT311 CPPR311	--
*This will be run from 2022 for new registrations							
Total credits				144			

Year 4							
Study Period	**Module title**	**Module code**	**HESQF Level**	**SAQA Credit**	**C or E**	**Pre-requisite**	**Co-Requisite**
Year 4 Semester 1	Diagnostics IIA	*DINT411*	*8*	12	C	DINT321 SYSP321	--
Year 4 Semester 1	Chiropractic Principles and Practice IVA	*CPPR411*	*8*	12	C	DINT321 CCHB301 CPPR321	--
Year 4 Semester 1	Research Methods and Bioethics	*RMBE411*	*8*	8	C	--	--
Year 4 Semester 1	Clinical Chiropractic and Biomechanics IIA	*CCHB411*	*8*	12	C	CCHB301 CPPR321	--
Year 4 Semester 1	Myofascial and Adjunctive Therapies II	*MYAT411*	*8*	12	C	DINT321 CCHB301 CPPR321	--
Year 4 Semester 1	Clinical Nutrition	*CLNT411*	*8*	8	C	DINT321	--
Year 4 Semester 2	Diagnostics IIB	*DINT421*	*8*	12	C	DINT411	--
Year 4 Semester 2	Public and Community Health	*PCOH101*	*8*	8	C	--	--
**Year 4 Semester 2*	Clinical Pharmacology	*PHRM411*	*7*	8	C	--	--
Year 4 Semester 2	Clinical Chiropractic and Biomechanics IIB	*CCHB421*	*8*	12	C	CCHB411 DINT411	--
Year 4 Semester 2	Chiropractic Principles and Practice IVB	*CPPR421*	*8*	12	C	CPPR411 CCHB411	--
Year 4 Semester 2	Diagnostic Imaging III	*DGNT411*	*8*	8	C	CCHB411	--
Year 4 Semester 2	International perspectives and practices of health care systems OR Clinical Mentoring and Assessment	*IPPH411* *CLMA101*	8	12	E	--	--
**This will remain for 2022/2023 (pipeline students) and be removed from 2024*							
Total credits				136			
Total credits		BACHR1		544			

(Pre-requisite: a module that is required to have been passed before one can register for this module; Co-requisite: a module that is required to be taken together with this module; SAQA: South African Qualifications Authority; HEQSF: Higher Educations Qualifications Sub-Framework; C: Compulsory; E: Elective; GE: General Education)

5.3 PROGRAMME RULES

5.3.1 Minimum Admission Requirements

In addition to Rule G7, persons applying for this qualification must be over 17 years of age, physically fit, and in possession of either a National Senior Certificate (NSC) or Senior Certificate (SC). In addition, the following requirements must be met.

(Amended w.e.f. 2020/01)

	NSC	Senior Certificate		NC(V)
COMPULSORY SUBJECTS	**Rating**	**HG**	**SG**	
English (1st Additional language)	4	D	B	70%
Mathematics	4	D	B	70%
Life Orientation	4	-	-	-
Biology/Life Sciences **AND/OR** Physical Sciences	4	D	B	70%
Another two 20 credit subjects (only one of the two can be another language)	4	-	-	-
No more than 2 languages at the senior certificate level	-	D	B	-

These requirements are in line with the requirements of the Allied Health Professions Council as per Act 63 of 1982 (as amended).

5.3.1.1 Admission requirements based on Work Experience, Age and Maturity; and Recognition of Prior Learning

The DUT general rules G7 (3), and G7 (8) respectively, will apply.

(Amended w.e.f. 2020/01)

5.3.1.2 Admission of International students

The DUT's Admissions Policy for International Students and General Rules G4 and G7 (5) of the General Handbook will apply.

5.3.2. Selection Criteria

All applicants must apply through the Central Applications Office (CAO). In accordance with Rule G5*, acceptance into the programme is limited. Since more applications are received than can be accommodated, the following selection processes will apply:
Initial shortlisting for selection is based on the applicant's academic performance in Grade 12 (Grade 11, or Grade 12 trial marks, will be used for current matriculants). Shortlisted applicants must submit an assignment as requested and will undergo an interview with the Chiropractic Department.
(Amended w.e.f. 2021/01)

Provisional acceptance is given to selected applicants awaiting National Senior Certificate (NSC) results. If the final Grade 12 NSC results do not meet the minimum entrance requirements, this provisional acceptance will be withdrawn.

Following submission of the assignment and interview, applicants will be ranked for selection using the weighting tabled below.
(Amended w.e.f. 2020/01)

Selection will be based on a ranking determined as follows:

ASSESSMENT	OUTCOME	WEIGHTING (%)
Results of the National Senior Certificate / Senior Certificate	Average of percentages for subjects	45
National Certificate (Vocational)		
Assignment	Percentage awarded to assignment	20
Interview	Percentage awarded to interview	35
Total		100

- Selected applicants will be placed into the four-year degree.
- Provisional / conditional acceptance is given to selected applicants awaiting National Senior Certificate (NSC) and National Certificate Vocational (NCV) results. If the final Grade 12 NSC or NCV results do not meet the minimum entrance requirements, this provisional /

conditional acceptance will be automatically withdrawn.

5.3.3 Pass Requirements

In addition to rules, G12 (1)*, G12 (9)*, G12 (10)*, G13 (1) (b)*, G13 (2)* and G14 (2)* the following departmental rules shall apply whilst the students are encouraged to apply themselves to their learning, and strive for the best academic results possible in order to adequately prepare themselves for their future careers, and to maximize possible employment opportunities.

Where multiple methods of assessments are used, sub-minimums of 50 % shall apply to the theory component(s), oral component(s), Objective Structured Clinical Examinations (OSCE's), practical components of examinations and the year / semester mark, as applicable:

This subminimum rule is outlined in the section below:

Year Mark		**Examination Mark**	
Theory (test average combined)	50%	Theory papers (all papers individually)	50%
Practical (test average combined)	50%	Practical papers (all papers individually)	50%
OSCE	50%	OSCE	50%
Viva voce (oral examination)	50%	Viva voce (oral examination)	50%
Competency	50%		

(Amended w.e.f. 2020/01)

5.3.4 Re-registration Rules

Any student failing a third level module, is required in the year in which the module/s are repeated, to complete a Continuous Clinical Practicum evaluations in Diagnostics IA and IB, Systemic Pathology IA and IB, Clinical Chiropractic and Biomechanics I, Chiropractic Principles and Practice IIIA and IIIB and Myofascial and Adjunctive Therapies I. This Continuous Clinical Practicum evaluation at minimum will constitute four (4) evaluations during the year, one in each quarter.
(Amended w.e.f. 2020/01).

Any student failing a fourth level module, is required in the year in which the module/s are repeated, to complete a Continuous Clinical Practicum evaluations in Diagnostics IIA and IIB, Clinical Chiropractic and Biomechanics

II, Chiropractic Principles and Practice IVA and IVB and Myofascial and Adjunctive Therapies II. This Continuous Clinical Practicum evaluation at minimum will constitute four (4) evaluations during the year, one in each quarter.
(Amended w.e.f. 2020/01).

5.3.5 Progression Rules

In addition to DUT rules G14* and G16*, the following rules shall apply: Students must pass all pre-requisite modules before they are admitted to the next level. Notwithstanding the above, please refer to Tables in section 5.2.

5.3.6 Exclusion Rules

In addition to the DUT General Rule G17*, a first year student who fails 50%+1 modules with an average of less than 50% in the failed modules, at the end of year 1, is not permitted to re-register in the Chiropractic programme. De-registration from any module is subject to the provisions of Rule G6 (2)*.
(Amended w.e.f. 2021/01).

In addition to Rule G16*, the following programme rules apply:
A student shall not be allowed to register for any module, which has an associated Clinical Practical Component, in the third year of the BHSc: Chiropractic if he/she has not completed an accredited course in Basic Life Support course, as approved by the Head of Department.
(Amended w.e.f. 2020/01).

5.3.7 Interruption of Studies

In accordance with Rule G23B, the minimum duration for this programme will be four (4) years of registered study and the maximum duration will be five (6) years of registered study, including any periods of WIL.

In addition to Rule G6B*, should a student interrupt their studies by more than three (3) consecutive years, the student will need to apply to the department for permission to re-register and will need to demonstrate currency of appropriate knowledge prior to being given permission to continue with the programme.
(Amended w.e.f. 2021/01).

5.3.8 Student Appeals

Rule G1 (8) of the DUT General Handbook applies.

6. MASTER OF HEALTH SCIENCES IN CHIROPRACTIC (MHSCR1)

6.1 PROGRAMME INFORMATION

The Master of Health Sciences in Chiropractic degree is a 180 credit qualification accredited by the DHET at NQF level 9. This qualification replaces the M.Tech: Chiropractic and is aligned with the HEQSF. The programme is a course work masters with 50% of dissertation work.

Only successful completion of this qualification shall allow degree status to be awarded or issued, such that the holder be able to register as an Intern. As this is a constituted requirement of Act 63 of 1982 (as amended). Consequences of failure to comply with this requirement could include non-registration as a practitioner once the MHSc Chiropractic qualification is obtained.
(Amended w.e.f. 2021/01)

6.1.1 Purpose of the programme

Master's Degree graduates must be able to reflect critically on theory and its application. They must be able to deal with complex issues both systematically and creatively, design and critically appraise chiropractic and health care research, make sound judgements regarding patient care and management and communicate their conclusions clearly to other medical specialist and non-specialist audiences, demonstrate self-direction and originality in tackling and solving problems through the use of evidenced based practice, act autonomously in planning and implementing tasks with a theoretical underpinning and continue to advance their knowledge, understanding and skills in the discipline of Chiropractic.

6.1.2 Duration of study

In accordance with the DUT Rule G24 and G6B the minimum duration of study is one year, including any periods of clinical practice and the maximum duration will be three years of registered study, including any periods of clinical practice.

6.1.3 Assessment and Moderation

The programme makes use of both summative examination modules and

continuous assessment modules and all assessments shall be moderated according to the DUT Assessment Policy.

6.1.3.1 Summative Assessments/Examinations

The examination in each module shall consist of the theory and/or practical and/or oral examinations as indicated with the syllabus of each module published in this handbook.
The calculation of the final mark shall be according to Rule G12 and G13 except where the rules for a particular programme state otherwise.

6.1.3.2 Continuous Assessments

These modules do not have a final examination. The results for these modules are determined through a weighted combination of assessments. As such, there are no supplementary examinations. Students are encouraged to work steadily through the period of registration in order to achieve the highest results possible.

- The assessment in each module shall consist of the theory and/or practical and/or oral assessments as indicated with the syllabus of each module published in this handbook.
- The calculation of the final mark shall be according to Study Guide for each module.

6.1.4 Registration with professional Board

Section 5.1.4 of this Handbook applies

6.1.5 Work Integrated Learning

The compulsory clinical practice component of this programme comprises:

WIL or clinical practical work forms part of the programmes within the Chiropractic programmes. In addition to Rule G28, the student must comply with the rules and regulations as set out in the relevant environment where placed.

The compulsory WIL component of this programme comprises attendance at the Chiropractic Day Clinic for the clinical practical as outlined in the Clinic Manual and relevant study guides.

Students must at all times conduct themselves as future professionals and

dress accordingly. Students shall adhere to specific instructions by a Head of Department/Head of Programme regarding specific conduct or attire required during practical and clinic sessions (for specific rules please refer to the relevant Study Guide or Clinic Manual).
(Amended w.e.f. 2021/01).

6.2 LEARNING PROGRAMME STRUCTURE

study Period	Module title	HESQF Level	Module code	SAQA Credit	C/E	Pre-requisite	Co-Requisite
Year 1 Annual	Research Project and Dissertation V	9	RPCR511 / RPCR521/ RPCR531	88	E	CCMA511 CPMJ511 DIIM511 CCPP511 CCPP521	
Year 1 Semester 1	Chiropractic Practice Management and Jurisprudence V	9	CPMJ511	12	E	CCPP511 DIIM511 RPCR511	
Year 1 Semester 1	Diagnostic Imaging V	9	DIIM511	12	C		CPMJ511 CCPP511 RPCR511
Year 1 Semester 1	Clinical Chiropractic Practicum VA	9	CCPP511	32	C		CPMJ511 DIIM511 RPCR511
Year 1 Semester 2	Clinical Chiropractic Practicum VB	9	CCPP521	32	C	CCPP511	RPCR511 CCMA511
Year 1 Semester 2	Chiropractic Case Management V	9	CCMA511	12	C	CCPP511	RPCR511 CCPP521
Year 2/3 Semester 1	Chiropractic Practice VB	9	CHPR501	0	C		RPCR521
Year 2/3 Semester 2	Chiropractic Practice VB	9	CHPR502	0	C		RPCR521 / RPCR531
Total credits	MHSCR1			188			

6.3 PROGRAMME RULES

6.3.1 Minimum Admission Requirements

In addition to Rule G24*, the minimum entrance requirement for the Master of Health Sciences in Chiropractic is a Bachelor of Health Sciences in Chiropractic or equivalent Chiropractic qualification, obtained in the year preceding admission to the Master of Health Sciences in Chiropractic. These requirements are in line with the requirements of the Allied Health Professions Council as per Act 63 of 1982 (as amended).

(Amended w.e.f. 2021/01)

6.3.1.1 Admission requirements based on Work Experience, Age and Maturity; and Recognition of Prior Learning

The DUT general rules G7 (3), and G7 (8) respectively, will apply.

(Amended w.e.f. 2021/01)

6.3.1.2 Admission of International students

The DUT's Admissions Policy for International Students and General Rules G4 and G7 (5) will apply.

(Amended w.e.f. 2021/01)

6.3.2 Selection Criteria

Those students who are eligible and who have obtained the BHSc: Chiropractic (NQF level: 8) at the Durban University of Technology will be accepted into the MHSc: Chiropractic automatically. Other applicants will be accepted in the MHSc: Chiropractic through a process of conferment of status (as outlined in Rule G10(A), once equivalence to the BHSc: Chiropractic has been determined.

(Amended w.e.f. 2021/01)

6.3.3 Pass Requirements

The final mark will be made up of 50% of the examination mark and 50% of the year/semester mark, in instances where examinations are written. Modules Research Project and Dissertation V and Chiropractic Practice Management and Jurisprudence V comply with Rule G 14 and GI5, requiring a 50% pass mark.

(Amended w.e.f. 2021/01)

In order to successfully complete Research Project and Dissertation V, the student must have had a research proposal submitted and approved via the Departmental Research Committee, Faculty Research Committee and/or the Institutional Research Committee. Thereafter they would undertake the research project and produce a dissertation that would be submitted for examination.
The following modules require a 60% pass mark: Chiropractic Clinical Practicum VA, Chiropractic Clinical Practicum VB, Diagnostic Imaging V and Chiropractic Case Management V. This applies to the theory component(s), oral component(s), Objective Structured Clinical Examinations (OSCE's), practical components of examinations and the year/ semester mark, as applicable:

Year Mark		**Examination Mark**	
Theory (test average combined)	60%	Theory papers (all papers individually)	60%
Practical (test average combined)	60%	Practical papers (all papers individually)	60%
OSCE	60%	OSCE	60%
Viva voce (oral examination)	60%	Viva voce (oral examination)	60%
		Competency	60%

In addition to DUT rules G14* and G16*, the following rules shall apply: Students must pass all pre-requisite modules before he/she is admitted to the next level. Notwithstanding the above, please refer to Tables above.
(Amended w.e.f. 2021/01)

6.3.4 Re-Registration Rules

Any student who fails to complete Research Project and Dissertation V in the first year of registration will be required to have successive registrations in Research Project and Dissertation V, as outlined in Rule G26(4), and Chiropractic Practice VA and Chiropractic Practice VB until complete.
(Amended w.e.f. 2021/01)

6.3.5 Exclusion Rules

Rule G24 of the General handbook refers.
(Amended w.e.f. 2021/01)

6.3.6 Interruption of Studies

In addition to Rule G6B*, should a student interrupt their studies by more than three (3) consecutive years, the student will need to apply to the department for permission to re-register and will need to demonstrate currency of appropriate knowledge prior to being given permission to continue with the programme.
(Amended w.e.f. 2021/01)

6.3.7 Student Appeals

Rule G1 (8) of the DUT General Handbook applies.

7. M.TECH: CHIROPRACTIC (MTCHR1)

7.1 PROGRAMME INFORMATION

The M. Tech Chiropractic is accredited by the DHET and is a course work masters with 50% of dissertation work. The M.Tech: Chiropractic will be phased out at the end of 2024. Final successive registration will be in 2024 with no further registrations after 2024.

7.1.1 Purpose of the programme

Only successful completion of this qualification shall allow degree status to be awarded or issued, such that the holder be able to register as a Chiropractor. As this is a constituted requirement of Act 63 of 1982 (as amended). Consequences of failure to comply with this requirement could include non-registration as a practitioner once the M.Tech: Chiropractic qualification is obtained.

This programme is being phased out and will accept no new registrations after 2020. Consecutive registration will no longer be accepted after completion of the 2022 registration period concludes and at the 2023 registration.
(Amended w.e.f. 2021/05).

7.1.2 Duration of study

In accordance with the DUT Rule G24 and G6B the minimum duration of study is one year, including any periods of clinical practice and the maximum duration will be three years of registered study, including any periods of clinical

practice.

7.1.3 Assessment and Moderation

The programme makes use of both summative examination modules and continuous assessment modules:

7.1.3.1 Summative Assessments / Examinations

• The examination in each module shall consist of the theory and/or practical and/or oral examinations as indicated with the syllabus of each module published in this handbook.
• The calculation of the final mark shall be according to Rule G12 and G13 except where the rules for a particular programme state otherwise.

7.1.3.2 Continuous Assessments

These modules do not have a final examination. The results for these modules are determined through a weighted combination of assessments. As such, there are no supplementary examinations. Students are encouraged to work steadily through the period of registration in order to achieve the highest results possible.

• The assessment in each module shall consist of the theory and/or practical and/or oral assessments as indicated with the syllabus of each module published in this handbook.
• The calculation of the final mark shall be according to Study Guide for each module.

7.1.4 Registration with professional Board

Section 5.1.4 of this Handbook applies

7.1.5 Work Integrated Learning (WIL)

The compulsory WIL component of this programme comprises attendance at the Chiropractic Day Clinic for the clinical practical as outlined in the Clinic Manual for Clinical Chiropractic V.
(Included w.e.f. 1996/01)

The expected outcomes as well as the supporting rules and regulations are outlined in the Clinic Manual.
(Amended w.e.f. 1996/01)

7.2 LEARNING PROGRAMME – STRUCTURE

Code	Modules	Assessment	Year of Study	NATED Credits
CBKI501	Clinical Biomechanics and Kinesiology V	E	5	0.125
CLCH501	Clinical Chiropractic V	E	5	0.250
CHPP501	Chiropractic Principles and Practice V	E	5	0.100
RPLX512	Research project and dissertation (1st registration)	CA	5	0.500
RPLX522	Research project and dissertation (Successive registration)	CA	5	
PMJU501	Practice Management and Jurisprudence V	E	5	0.025

7.3 PROGRAMME RULES

7.3.1 Minimum Admission Requirements

B.Tech: Chiropractic, obtained in the year preceding admission to the M.Tech: Chiropractic. These requirements are in line with the requirements of the Allied Health Professions Council as per Act 63 of 1982 (as amended).
(Amended w.e.f. 2004/01)

7.3.1.1 Admission requirements based on Work Experience, Age and Maturity; and Recognition of Prior Learning

Mature age applications and applications via the recognition of prior learning follow the guidelines and processes as set forth in the DUT rules and guidelines for the respective application processes (General Rules G7 (3)).
(Amended w.e.f. 2006/05).

7.3.1.2 Admission of International students

For the admission of international students, DUT's Admissions Policy for International Students and General Rules G4 and G7 (5) will apply.
(Amended w.e.f. 2006/05)

7.3.2 Selection Criteria

Those students who are obtain the B. Tech Chiropractic qualification in the year preceding will be eligible for the M. Tech Chiropractic.

7.3.3 Pass Requirements

Notwithstanding the DUT pass requirements (G14 and G15), and those detailed as follows, students are encouraged to apply themselves to their learning, and strive for the best academic results possible in order to adequately prepare themselves for their future careers, and to maximize possible employment opportunities.

Any student failing a fifth year module is required in the year in which the module/s is/are repeated to complete a Continuous Clinical Practicum evaluation in Clinical Chiropractic V, Chiropractic Principles and Practice V and Clinical Biomechanics and Kinesiology V. This Continuous Clinical Practicum evaluation at minimum will constitute 4 evaluations during the year, one in each quarter.

(Amended w.e.f. 2006/05)

The final mark will be made up of 50% of the examination mark and 50% of the year/semester mark.

(Amended w.e.f. 2006/05)

Where multiple methods of assessment are used, sub-minimums of 50% shall apply to the theory component(s), oral component(s), Objective Structured Clinical Examinations (OSCE's), practical components of examinations and the year / semester mark, as applicable:

Year Mark		**Examination Mark**	
Theory (test average combined)	50%	Theory papers (all papers individually)	50%
Practical (test average combined)	50%	Practical papers (all papers individually)	50%
OSCE	50%	OSCE	50%
Viva voce (oral examination)	50%	Viva voce (oral examination)	50%
		Competency	50%

7.4.4 Re-registration Rules

Please refer to Rule G16.

7.4.5 Exclusion Rules

Please refer to Rule G17.

7.4.6 Interruption of Studies

In accordance with Rule G24, the minimum duration for this programme will be one (1) year of registered study and the maximum duration will be three (3) years of registered study, including any periods of WIL. Should a student interrupt their studies by more than three (3) years, the student will need to apply to the department for permission to reregister and will need to prove currency of appropriate knowledge prior to being given permission to continue with registration.

(Amended w.e.f. 2006/05)

7.4.7 Student appeals

Rule G1 (8) of the DUT General Handbook applies.

8 Doctor of Chiropractic (DRCHR1)99.1 PROGRAMME INFORAMTION

This full research qualification is aligned to Rule G25 and G26 and the guidelines in the Post Graduate Student Handbook. This 360 credit qualification is offered at the SAQA NQF Level 10.

8.1.1 Purpose of the Programme

Successful completion of this qualification shall allow degree status but this will not have any effect on the registered status of the Chiropractor as this is an additional degree beyond the minimum required to be able to register as a Chiropractor. As this is a constituted requirement of Act 63 of 1982 (as amended).

8.1.2 Duration of study

Rule G25(2) has reference.

8.1.3 Assessment and Moderation

Post graduate assessment will be aligned to Postgraduate Policies and Guidelines. Please refer to Rule G25 (4) and the Postgraduate Student Handbook.

8.1.4 Registration with professional Board

This degree does not affect registration with the professional board as the MHSc: Chiropractic/M.Tech: Chiropractic degree is required for registration.

8.1.5 Work Integrated Learning (WIL)

There is no WIL associated with this programme.

8.2 LEARNING PROGRAMME STRUCTURE

Code	Module	Year of Study	Assessment Type	SAQA / NATED Credits	Pre-requisites	Co-requisites
DRCHR1	Dissertation	2	External Examination	360	None	None

8.3 PROGRAMME RULES

8.3.1 Minimum Admission Requirements

In addition to Rule G25 (1), persons must be in possession of a MHSc: Chiropractic/M.Tech: Chiropractic Degree, or have been granted status or advanced standing according to Rule G10. Please also refer to the Postgraduate Student Handbook.

8.3.2 Pass Requirements

Notwithstanding the DUT pass requirements (G14 and G15), and those detailed as follows, students are encouraged to apply themselves to their learning, and strive for the best academic results possible in order to adequately prepare themselves for their future careers, and to maximize possible employment opportunities.

8.3.2 Re-registration Rules

Please refer to Rule G26 (5) and the Postgraduate Student Handbook.

8.3.3 Exclusion Rules

Please refer to Rules G25 (2) (b; c(ii)) in the General Student Handbook; and the Postgraduate Student Handbook.

8.3.4 Interruption of Studies

In accordance with Rule G25 (2), should a student interrupt their studies by more than three (3) years, the student will need to apply to the department for permission to reregister and will need to prove currency of appropriate knowledge prior to being given permission to continue with registration. Please refer to the Postgraduate Student Handbook.

8.3.5 Student appeals

Rule G1 (8) of the DUT General Handbook applies.

9. MODULE CONTENT AND ASSESSMENT

NB: Students are to read this section in conjunction with the relevant study guides.

9.1 BACHELOR OF HEALTH SCIENCES: CHIROPRACTIC (BACHR1)

BIOCHEMISTRY (BCHY201)

Contact time (hours per week)

Theory : 2 periods
Practical: 2 periods
Tutorial: 1 period

Assessment:

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	40%
Examination Mark	50%
Final Mark	50%

Topics Covered

Theory : Collagen, Amino acids and peptides, Proteins, Haemoglobin, Enzymes, Biological oxidation, Carbohydrates, Lipids, Membranes, Metabolism of nucleotides and nucleic acids, DNA, RNA, Protein synthesis and the genetic code, Amino acid

metabolism, Nutrition
Practical's : Carbohydrates, proteins, lipids and metabolism processes.

BIOLOGICAL SCIENCES (BIOS101)

Contact time (hours per week)

Theory: 2 periods
Practical: 2 periods
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	40%
Examination Mark	50%
Final Mark	50%

Topics Covered

MODULE 1: A VIEW OF LIFE : AIM: To introduce the student to the fields of biology and Microbiology as a science. Topics: Fundamental concepts of biology, Scientific method, Introduction to microbiology – history and scope, Biological important compounds. **MODULE 2:** STRUCTURE OF THE EUKARYOTE : AIM: To revise the general cell theory and to acquaint the student with the diversity of cells forms and sizes. The process of photosynthesis is used as an example of cell physiology and the corresponding cellular adaptations. Topics: Cell theory, Prokaryote cells, Eukaryote cells, Plant tissues. **MODULE 3:** MICROBIAL NUTRITION, GROWTH AND CONTROL : AIM: To acquaint the student with the requirements for microbial nutrition, To acquaint the student with the basic microbial requirements for growth, To acquaint the student as to how microbial growth can be controlled. Topics: Microbial Nutrition, Microbial Growth, Control of microbial growth. **MODULE 4:** GENETICS AND DEVELOPMENT : AIM: To acquaint the student with the cellular and biochemical bases for the inheritance of characteristics, the mechanism of this inheritance, and its expression from generation to generation; To acquaint the student with the basics for genetic disorders and application of genetics in current medical practice. Topics: DNA and genetic information, Gene expression, Embryonic development in animals, Reproduction in eukaryote cells, Mendelian genetics. **MODULE 5:** ORIGIN OF LIFE : AIM: To acquaint the student with modern theories

of the origin and early evolution of life, To acquaint the student with the currently accepted taxonomic system for the classification of life forms. Topics: Origin of life, Classification of organisms. **MODULE 6:** VIRUSES : AIM: To attempt to relate classification to the simplest life forms: the viruses, To help students understand how viruses replicate and how viral infection can be controlled. Topics: Viruses are particles, Classification of viruses, Viral replication. **MODULE 7:** BACTERIA : AIM: To provide students with an overview of bacterial structure, To show students the different modes of bacterial reproduction, To group bacteria based on their nutrition requirements, To fully understand the manner in which bacteria are classified. Topics: Bacterial structure, Bacterial reproduction, Bacterial nutrition, Bacterial classification. **MODULE 8:** PROTISTS : AIM: To provide students with an indication of the extent and diversity of the protistan kingdom and its relationship with other eukaryote kingdoms. Topics: Origin of Eukaryotes, Algae (Green, Brown, Golden-brown, Dinoflagelles, Euglenoids, Red Algae), Protozoa (Amoeboids, Cilliates, Zooflagelletes, Sporozoa). **MODULE 9:** FUNGI : AIM: To acquaint students with the members of the kingdom Fungi, and how these organisms interact with other eukaryote organisms. Topics: Nutrition, Structure, Growth, Reproduction, Fungal classification, Symbiotic relationships of fungi. **MODULE 10:** ANIMALS : AIM: To acquaint the student with the basic structure of animals, and representative organisms of the animal kingdom. Topics: Classification of animals, Multicellular animals, Tissue layers in animals, Bilaterally symmetrical animals, Animals with pseudocoelom, Coelomate animals, Ancestors of chordates, Chordates. **The scope of microbiology is briefly described (but not practically explored).** Types and characteristics of bacteria, protozoa, fungi, rickettsias, chlamydias, mycoplasms and viruses are described. General bacterial physiology is described in terms of the effects of environmental conditions (e.g. heat therapy, cryotherapy, chemotherapy and antibiotics). Pathogenesis, disease transmission and disease-related micro-organisms are explained, compared and contrasted. Basic principles of sterilization and disinfection are explained within a clinical context. Antimicrobial agents and chemotherapy are described. The factors determining the major biomes are analysed theoretically. Energy flow through an ecosystem is theoretically investigated. Simplified cycles of important nutrients are described. Primary and secondary successions are analysed. The relationship between a population and its environment is explored.

CHEMISTRY (CHHC103)

Contact time (hours per week)

Theory: 2 periods
Practical: 3 periods
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	40%
Examination Mark	50%
Final Mark	50%

Topics Covered

The principles of general inorganic and physical chemistry are explained, interpreted and applied under the following topics : **INTRODUCTION :** The role that chemistry plays in our everyday life. Explain the term "*chemistry*". Give examples of the application of chemistry in everyday life. State and explain the general principles in the "scientific method". **MEASUREMENTS :** Write large and small numbers in scientific notation. Apply the rules of significant figures to multiplication and division and addition and subtraction. Convert between metric system of units that contain prefixes or by using conversion factors. Define density and specific gravity and perform relevant calculations. Explain how volume displacement is used to calculate density. **ENERGY AND MATTER :** Describe the changes of state between solids, liquids and gases and calculate the energy involved. Differentiate between the Calorie and the calorie. Convert between the following energy units: J, cal, Kj, and kcal. Define and perform calculations using the specific heat. Identify the physical state of substances. Explain and perform calculations for : heat of fusion, sublimation, boiling, condensation and heat of vaporization. **ATOMS AND ELEMENTS :** Differentiate between groups and periods in the periodic table. Classify elements as metals, non-metals and metalloids. Describe the structure of elements in terms of atoms and subatomic particles. State the number of protons, neutrons, and electrons when given the atomic number and the mass of an atom. Give the number of protons, electrons, and neutrons in the isotopes of an element. Write the electron arrangement for the first 18 elements and use it to explain the periodic law. Use the electron arrangement to explain periodic trends. Write electron dot symbols for valence electrons. Distinguish between an atom, element, a mixture and a compound. Differentiate between homogeneous and heterogeneous mixtures. **COMPOUNDS AND THEIR BONDS :** Write the symbols of the simple ions for the representative elements using the octet rule. Define the octet rule and name the ions for elements in the periodic table. Describe the formation of an ionic bond and covalent bond. Understand the difference between ionic and covalent bond using any suitable example. Write formulas and names for

ionic and covalent compounds. Identify and list the formulae and names of compounds. Determine the polarity of a bond and a compound using electro-negativity and VSEPR theory. Explain the concept of electro-negativity and define the VSEPR theory with an aid of examples. **CHEMICAL REACTIONS AND QUANTITIES :** Identify a change in a substance as a chemical or physical change. Identify the properties of chemical and physical changes. Write a balanced chemical equation. Write and balance chemical equations using several examples. Identify different types of chemical reactions. Classify chemical reactions as combination, displacement, decomposition and neutralization. Define the terms reduction and oxidation. Define exothermic and endothermic reactions. Explain exothermic and endothermic reactions and list factors that affect chemical reactions. Use Avogadro's number to determine the number of particles in a given number of moles. Define the concept of a mole. Perform calculations of atoms, molecules using Avogadro's numbers. Calculate the molar mass and interconvert between moles and grams of a substance. Calculate the molar mass of elements and compounds. Calculate the moles or grams of substances. **GASES :** Describe the kinetic theory of gases and the properties of gases. Define the various gas laws ; Bolye's, Charles', Gay-Lussac's and Dalton laws. Define the pressure-volume, temperature –volume, temperature-pressure, volume- moles relationships and partial pressure. **SOLUTIONS :** Define and distinguish between solution, solute and solvent. Differentiate between electrolytes and non- electrolytes. Define solubility and distinguish between a saturated and an unsaturated solution. Describe the effect of temperature on solubility and factors that affect solubility. Calculate percent concentration. Calculate the molarity of a solution and describe how dilution of solutions is performed. Calculation of volumes of solutions in chemical reactions. Identify a mixture as a solution, a colloid or a suspension and describe osmosis and dialysis. **ACID & BASES :** Describe and name acids and bases. Differentiate between Arrhenius, Bronsted-Lowry and Lewis acids and bases. Write equations for the dissociation of strong and weak acids and bases. Define auto protolysis with examples. The pH scale and calculations involving pH. Writing balanced equations for the reaction of acids and bases. Define buffers and describe their role in maintaining pH of a solution. **NUCLEAR RADIATION :** Describe alpha, beta & gamma radiation and differentiate between radioactivity, radiation and radioisotope. Write equations showing mass numbers and atomic numbers for radioactive decay. Describe how radiation is measured. Calculation of half-life of a radioisotope. Describe the use of radioisotopes in medicine. Define nuclear fission and nuclear fusion.

The principles of organic chemistry are explained, interpreted and applied in the following areas : **INTRODUCTION :** Describe the role that organic chemistry plays in our everyday life. Distinguish between organic and inorganic compounds. Identify and compare properties of organic and inorganic compounds. Obtain a list of

properties of common inorganic and organic compounds. Explain the bonding in organic compounds. Explain the tetrahedral structure of carbon from number of valence electrons in C and H. Define valence electrons and determine for C and H. Use the VSEPR theory to explain the tetrahedral shapes of saturated hydrocarbons. Draw molecular models/or diagrams of 3-D representations of organic molecules. **ALKANES AND CYCLOALKANES** : Write the IUPAC names and structural formulae for the first ten alkanes and the first six cycloalkanes. Draw and differentiate between expanded and condensed structures for continuous chains. Write the geometric formula for cycloalkane. Write the IUPAC names and structural formulae for alkanes and cycloalkanes with substituents. Recognize that an alkane with 4 or more carbon atoms can have branching. Write the names and formulas of compounds with alkyl and halo substituents. State the IUPAC Rules for naming of alkanes with substituents from structures and vice versa. Identify the physical and chemical properties and classify alkanes as gases or liquids. Identify the solubility and density of alkanes and the relationship to their physical state. Explain the reactivity of alkanes in terms of combustion and the generation of heat. Examine the case study of hazardous materials. Explain the environmental note on crude oil showing the different fractions and how they relate to properties. Classify organic molecules according to their functional group. Define a functional group and shown how this can be used to classify groups of organic compounds with similar properties. Explain the covalent bonding for the elements found in organic compounds (C, H, N, O, S, and X). Identify the classes of organic compounds with their characteristics and functional groups for :-alkenes, alkynes, aromatics, alcohols, ethers, aldehydes, ketones, carboxylic acids, esters, amines and amides. **UNSATURATED HYDROCARBONS**: Identify structural formulas for alkenes, cycloalkenes, alkynes and aromatics and write their IUPAC and/or common names. Identify functional groups and name alkenes and alkynes according to IUPAC rules and some common names. Identify the structural formulae and names for cis- trans isomers. Give the structural formulae and names for the organic products of addition reactions. Draw the structural formulae of monomers that form a polymer or a three monomer section of a polymer and give uses of everyday polymers products. Describe the bonding in benzene and the naming and drawing of aromatic compounds. Explain the physical properties of unsaturated hydrocarbons in terms of their molecular structure. Recognise common alkenes and alkynes found in everyday life. Identify the different reactions :- hydrogenation, hydration and halogenation of alkenes and alkynes. Explain the chemical test to identify saturated and unsaturated hydrocarbons. Identify common aromatic compounds used in everyday life together with other functional groups attached e.g. aspirin. **ORGANIC COMPOUNDS WITH OXYGEN AND SULPHUR:** Identify, describe and differentiate the structures, names, physical properties and reactions of the alcohols, ethers, thiols, aldehydes and ketones.

Recognise an organic compound given the structure and name it according to the IUPAC system. Given a name, draw the structure of the associated alcohol. Classify alcohols as either primary, secondary or tertiary. Given a structure of a simple ether or thiol, recognize the structure and name it appropriately. Given the name of a simple ether or thiol, draw the associated structure. Differentiate between alcohols ethers and thiols and hydrocarbons, in terms of their physical properties such as boiling point and solubility in water and non-polar substances. Draw the products formed and state the conditions required for alcohols to undergo either dehydration or oxidation. Show how thiols can undergo oxidation and name the product type formed. Differentiate between the structure of an aldehyde or ketone by stating the name of the group to which the given structure belongs. Given the structure of an aldehyde or ketone, and name it correctly according to the IUPAC system of nomenclature. Given the name of an aldehydes or ketone, draw the associated structure. Compare the boiling points of aldehydes and ketones with other groups of organic compounds. State the difference in reactivity between aldehydes and ketones when subjected to oxidizing conditions. Name the type of compounds formed from the oxidation of ketones. Name and describe the chemical tests that are used to identify and differentiate between aldehydes and ketones. **CARBOXYLIC ACID AND ESTERS:** Draw the general formula to distinguish the different bonds formed by the carbonyl group in carboxylic acids, aldehydes, ketones, esters and amides. Use examples of organic compounds to illustrate the bonding of the carbonyl carbon atom with other atoms to distinguish between the functional groups. Draw the condensed structural formulae of carboxylic acids in different forms. Name carboxylic acids according to IUPAC rules. Draw and name the aromatic carboxylic acids with substituents. Recognize the common names and uses of some carboxylic acids. Identify the physical properties of carboxylic acids. Compare the boiling point of carboxylic acids with those of alcohols, aldehydes, and ketones of similar masses. Describe the solubility of carboxylic acids with water. Write the reaction equation for the acidity and ionization of carboxylic acids. Explain and give the neutralization reaction of carboxylic acids. Describe the formation of esters from carboxylic acids and alcohols and define the term "Esterification". Name the esters according to IUPAC rule and know their condensed structural formulae. Identify the common names and flavours/odours of some esters. Describe the acid and base hydrolysis of esters and write their respective reaction equations. **AMINES AND AMIDES :**Write the condensed structural formulae and classify amines as either 1^o, 2^o or 3^o. Give the names of amines and aromatic amines. Describe the physical properties of amines. Compare the boiling points of amines with alcohols and hydrocarbons. Describe the solubility of amines with water. Write the condensed structural formulae, names of reactants and products for the reaction of amines with acids and bases. Write condensed structural formula, formation and properties of amides. Given the structure, write the IUPAC and common names of

amides. Compare the physical properties of the different classes of Amides. Write the reaction equations for the acid and base hydrolysis of amides.

CHIROPRACTIC PRINCIPLES AND PRACTICE I (CPPR111)

Contact time (hours per week)

Theory: 2 theory
Practical: 2 practical
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

PRACTICAL: The requirements for palpation, in terms of the patient and the practitioner have been understood. Hygiene (personal and technique related). Patient interaction skills (doctor patient rapport). Professionalism (etiquette, empathy, cultural sensitivity). Basic biomechanics related to static and motion palpation. Axes. Planes. The implications of the incorrect procedures when palpating have been understood. Indications, contra-indications and implications. The human torso of the patient has been statically palpated, in terms of the musculature and osseous structures. The viscera of the torso have been identified and correctly marked on the partner. Lungs, Heart – borders and valves, Liver, Spleen, Gallbladder, Kidneys, Bladder, Ovaries, Appendix, Aorta, renal, iliac vessels. Auscultation points at prominent diagnostic points. The use of simple case presentations to highlight the clinical relevance of palpatory and surface anatomy in the clinical setting. Examples (include but not limited to) : Myocardial infarction / angina, Pneumothorax (stab victim / gun shot), Appendicitis, Gastric and duodenal ulcers, Ectopic pregnancies, Cirrhosis of the liver (drug abuse, alcohol abuse). A reflective report on an observed chiropractic patient consultation, including but not limited to: A description of the initial impression of the patient, the chiropractor's bedside manner, the various components of the consultation, the patient's condition and the treatment / management employed.

THEORY: Chiropractic / medical sciences: The development of manipulation in chiropractic, osteopathy and medicine is compared and contrasted. "Wellness" and its integral relationship to chiropractic are described. The concepts of "Reductionism" and "Holism" are compared and contrasted in the chiropractic and medical contexts. The current debates on the future trends of chiropractic are analysed. The social and scientific development of the chiropractic profession will be chronologically described with specific emphasis on its historical development. The generalist and specialist schools of thought in chiropractic are described and defended. The demographics of chiropractic patients is described and related to the above.

CHIROPRACTIC PRINCIPLES AND PRACTICE II (CPPR211)

Contact time (hours per week)

Theory: 1 period
Practical: 3 periods
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

The requirements for palpation, in terms of the patient and the practitioner have been understood : Hygiene (personal and technique related), Patient interaction skills (doctor patient rapport), Professionalism (etiquette, empathy, cultural sensitivity).The implications of the incorrect procedures when palpating have been understood. Indications, contra-indications and implication of performed procedures. Demonstrate and describe motion palpation techniques and their theoretical basis - of the spine: The spine – cervical spine, thoracic and lumbar spines, sacro-iliac joints and Theory related to movement patterns and motion palpation parameters of the above joints. Demonstrate and describe static and motion palpation techniques and their theoretical basis - of the extremities and TMJ : Upper extremity – sternoclavicular and acromioclavicular joints, shoulder, elbow, and joints of the wrist and hand; Lower

extremity – hip, knee, and joints of the ankle and foot; Thoracic cage; Theory related to movement patterns and motion palpation parameters of the above joints. The extremities and TMJ of the patient have been statically palpated, in terms of the osseous, ligamentous, muscular and other soft tissue structures. Musculature : Relevant upper extremity musculature. Relevant lower extremity musculature. Relevant TMJ musculature. Neurovascular structures : Superficial neurovascular structures. Ligamentous and osseous structures. Elementary case studies are discussed, and effectively communicated. Examples (include but not limited to) : Sciatica, Radiculopathy, Thoracic outlet syndrome. Basic Biomechanics: Demonstrate an introductory knowledge of biomechanics of the head, neck, back, upper limb and lower limb: Types of movements , Levers and moments, Planes, Axes. Spinal curves and spinal loading : Load displacement, Hysteresis, Stiffness, Creep. Functional spinal unit movement - describe the three joint complex for the cervical, thoracic, lumbar and sacral regions as well as junctional areas. Describe and discuss the basic development of human posture: Milestones in spinal development. Milestones in extremity development. Describe common congenital anomalies and age related changes. Describe and discuss the normal human posture in terms of postural control (e.g. muscles) and alignment assessment (e.g. anterior, posterior). Describe the effects of structural variants on human posture (e.g. hemipelvis). Describe the effects of non-structural variants on normal human posture including but not limited to: Hyper / hypo kyphosis, Hyper / hypo lordosis, Scoliosis, Flatback and Swayback. Elements of postural assessment, such as history, observation and examination are described in detail, with respect to: The sitting, standing, prone and supine patient.The anterior, posterior and lateral evaluations of the patient. Introduction to referred and radicular pain patterns. Define ergonomics and describe its relationship to posture. Assess the impact of different ergonomic environments on posture. Define specific nomenclature applicable to the human gait cycle. Define and describe the gait cycle (walking and running) and all its components and stages. Identify and explain abnormal gait (examples including but not limited to): Arthrogenic gait, Antalgic gait. Perform postural, gait and palpatory assessments in a clinical setting. Identify and define the various knowledge generation mechanisms as used in health care. Identify and classify common research study designs utilised in health care. Identify and implement appropriate database searches in order to retrieve selected publications. Referencing techniques are consistently and accurately applied.

CHIROPRACTIC PRINCIPLES AND PRACTICE IIIA (CPPR311)

Contact time (hours per week)

Theory: 2 periods

Practical: 4 periods
Tutorial: as required

Assessment
Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima
Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered
THEORY AND PRACTICAL : Chiropractic terminology. The wellness and disease paradigms in patient management. Chiropractic and osteopathic theories. Static palpation of the spine and pelvis. (Review). Introduction to spinal and pelvic kinematics. Motion palpation of the spine and sacroiliac joint. (Review). Static joint challenge, joint play and end-joint analysis of the spine. (Review). The manipulable lesion. Types, characteristics and effects of manipulation. Manipulation indications, contra-indications & complications. Basic adjusting skills (impulse, body-drop, recoil). An introduction to the philosophy of science. Explain the specific role of the various muscles and joints in the gait cycle (- Joint motion during running, Muscle activity during running)

CHIROPRACTIC PRINCIPLES AND PRACTICE IIIB (CPPR321)
Contact time (hours per week)
Theory: 3 periods
Practical: 4 practical
Tutorial: as required

Assessment
Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima
Year Mark	50%
Examination Mark	50%

Final Mark 50%

Topics Covered

THEORY AND PRACTICAL : The biopsychosocial paradigm in patient management. Patient management. Rehabilitation principles and implementation. Evidence informed practice. Postural assessment. Spinal manipulation indications, contra-indications & complications. Advanced spinal adjusting skills (impulse, body-drop, recoil). Explain the specific role of the various muscles and joints in the gait cycle (Joint motion during running, Muscle activity during running). The effects of age, disease, injury and misalignment on gait.

CHIROPRACTIC PRINCIPLES AND PRACTICE IVA (CPPR411)

Contact time (hours per week)

Theory: 1 period
Practical 1 period
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark 50%
Examination Mark 50%
Final Mark 50%

Topics Covered

For the extremities (upper limb): Chiropractic management of the upper extremity patient. Chiropractic and other manipulative techniques for the upper extremity. Strapping, bracing and rehabilitation protocols. The pregnant and paediatric patient.

CHIROPRACTIC PRINCIPLES AND PRACTICE IVB (CPPR421)

Contact time (hours per week)

Theory: 1 period
Practical 1 period

Tutorial: as required

Assessment
Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima
Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered
For the extremities (lower limb): Chiropractic management of the lower extremity patient. Chiropractic and other manipulative techniques for the lower extremity. Strapping, bracing and rehabilitation protocols. Professionalism : Hallmarks/Virtues of a profession. Professional and statutory councils. Sociology of chiropractic. Philosophy of Chiropractic. Chiropractic and other manipulative techniques. Geriatrics : Common diseases of the elderly that affect patient care, Exercise and rehabilitation focussing on the specific needs of the elderly, Adjusting.

CLINICAL ANATOMY (ANGR221)
Contact time (hours per week)
Theory: 2 periods
Practical: 6 periods
Tutorial: as required

Assessment
Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima
Year Mark	40%
Examination Mark	50%
Final Mark	50%

Topics Covered
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, Fascial 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, Brainstem and spinal cord, Cerebellum, Thalamus, epithalamus and hypothalamus, Reticular formation, Visual , olfactory and limbic systems, Cranial nerves. Blood supply of the brain.

CLINICAL CHIROPRACTIC AND BIOMECHANICS I (CCHB301)

Contact time (hours per week)

Theory: 2 periods
Practical: 3 periods
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Practical : Orthopedic physical examination of the : Cervical, Thoracic , Lumbar regions.

Theory : Mechanical Spinal Pain : Low Back, neck and thoracic spinal pain. By the end of this course the student will be able to discuss, describe and explain the three phases of degeneration with respect to mechanical low back pain, the diagnostic criteria, signs and symptoms, natural history, clinical features, investigative techniques, differential diagnosis and comprehensive outline of treatment for mechanical spinal pain conditions, which may include but are not limited to Scoliosis, Kyphosis, Lordosis and Spondylolisthesis. **Biomechanics: including but not limited to the following:** Introduction to biomechanics and kinesiology. Biomechanical properties of bones, collagen and muscles. Biomechanics of the vertebrae, intervertebral discs, spinal

ligaments and spinal muscles. Biomechanics of the osseous pelvis and sacroiliac joint. Biomechanics of the central and peripheral nervous systems. Biomechanics of scoliosis. Biomechanics of the cervical, thoracic and lumbar spines. Biomechanics of the rib-cage. Biomechanics of spinal; trauma and stress. Biomechanics of instability. Biomechanics of spinal manipulation.

CLINICAL CHIROPRACTIC AND BIOMECHANICS IIA (CCHB411)

Contact time (hours per week)

Theory: 3 periods
Practical: none
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Topics covered include relevant anatomy and select orthopaedic testing of the following extremities : Shoulder, Elbow, Hand and Wrist, Temporomandibular joint. Conditions should include but not be limited to : Shoulder : Sternoclavicular Joint Injuries, Clavicular Injuries, Clavicular Fractures, Acromioclavicular Joint Injury, Shoulder Impingement Syndrome, Bicipital Tendonitis, Infraspinatus Syndrome, Multidirectional Glenohumeral Instability, Posterior Glenohumeral Instability, Rotator Cuff Injury, Superior Labrum Lesions, Supraspinatus Tendonitis, Swimmer's Shoulder, Adhesive Capsulitis. Elbow : Elbow and Forearm Overuse Injuries, Ulnar Collateral Ligament Injury, Biceps Muscle Rupture, Olecrenon Bursitis, Floating Elbow, Lateral Epicondylitis, Medial Epicondylitis, Little League Elbow Syndrome, Humeral Capitellum Osteochondritis Dissecans, Elbow Dislocation, Compartment Syndromes, General Elbow Fractures, Elbow Fractures and Dislocations in the Adult Patient, Forearm Fractures, Supracondylar Fractures of the Humerus, Nursemaids Elbow, Ulnar Nerve Entrapment. Wrist and Hand : Soft Tissue Injury of the Wrist and Hand, Ulnar-Sided Wrist Pain, Triangular fibrocartilage Complex injuries, Carpal Tunnel Syndrome, Hand,

Fractures and Dislocations: Wrist, De Quervain's Tenosynovitis, Gamekeeper's Thumb, Intersection Syndrome, Flexor Tendon lacerations, Ganglions, Nerve Entrapment and Compression Syndromes of the Hand. The Temporomandibular Joint: Temporomandibular Joint Syndrome.

CLINICAL CHIROPRACTIC AND BIOMECHANICS IIB (CCHB421)

Contact time (hours per week)

Theory: 2 periods
Practical: 1 period
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Topics covered include relevant anatomy and select orthopaedic testing of the following extremities : Hip, Knee, Foot and Ankle. Conditions should include but not be limited to : **Foot and ankle conditions**, Talocrural Joint Injuries, Subtalar Joint Injuries, Hindfoot Injuries, Midfoot Injuries, Forefoot Joint Injuries, Mechanics of the foot as a whole and through its component parts. Foot and ankle related tendonitis syndromes**.** Foot and ankle related bursitis syndromes**.** Local pathologies, including but not limited to plantar fasciitis, fat pad syndrome, metatarsalgia, mortons neuroma, bunion (Hallux abducto valgus), toe deformities, fractures, avascular necrosis, heel spur syndromes, ankle sprains. Systemic conditions that affect specifically the foot and ankle, particularly those that present with symptoms similar to local pathologies. **Leg and Knee conditions :** Tibio-femoral Injuries, Patello-femoral Joint Injuries, Tibio-fibula Injuries, Muscular injuries. Mechanics of the knee as a whole and through its

component parts. Leg and knee related tendonitis syndromes. Leg and knee related bursitis syndromes. Local pathologies, including but not limited to compartment syndromes, fat pad syndrome, fractures, avascular necrosis, osteoarthritis, ITB, PFPS and its component precursors. Systemic conditions that affect specifically the leg and foot, particularly those that present with symptoms similar to local pathologies. **Thigh and Hip conditions :** Hip Injuries, Pubic symphysis Joint Injuries, SI joint injuries, Muscular injuries. Mechanics of the pelvis as a whole and through its component parts. Thigh and hip related tendonitis syndromes. Thigh and hip related bursitis syndromes. Local pathologies, including but not limited to compartment syndromes, muscle tears, fractures, avascular necrosis, osteoarthritis, osteitis pubis, insertional tendonitis, myositis ossificans. Systemic conditions that affect specifically the thigh and hip, particularly those that present with symptoms similar to local pathologies.

CLINICAL MENTORING AND ASSESSMENT (CLMA101)

Contact time (hours per week)

Theory: 2 periods
Practical: none
Tutorial: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%
Final Mark	50%

Topics Covered

Workplace learning – theories & principles. (Co-op learning, Experiential Learning, Work Integrated Learning). Role of CHE, HEQC, HEQF, DoH, HPCSA, SETAs, Skills Development. Related terminology. Clinical mentoring teaching and learning strategies. Demonstration techniques. Compiling a task sheet. Communication with mentee, patients/clients. Clinical assessment strategies. Assessment tools/rubrics. Preparing for an assessment. Conducting assessments. Evaluate evidence and making judgements. Providing feedback. Quality Assurance and evaluation.

CLINICAL NUTRITION (CLNT411)

Contact time (hours per week)

Theory: 2 periods

Practical: none
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Investigated human dietary needs and nutrition : Dietary and nutrient goals, guidelines and guides for wellness and disease prevention (e.g. dietary guidelines, RDA and the application thereof) are compared and contrasted. Factors affecting food choices are discussed. Factors influencing the nutrient composition of foods are analysed. Nutrient supplementation is investigated. The pro's and con's of food fortification are investigated and analysed. The use of functional foods (neutraceuticals) are researched. Assessed community nutrition: Nutrition during the various stages of the life cycle are compared. Diseases of lifestyle including but not limited to: Obesity, Coronary heart disease, Diabetes mellitus, Cancer, Hypertension, Stroke, Gastrointestinal diseases, are assessed. Vegetarianism is discussed. The effect of nutrition on immune status (e.g. malnutrition –infection and AIDS) is analysed. Economical food purchases are researched. Discussed and investigated clinical nutrition. Nutritional status through Anthropometric assessment, Biochemical assessment, Clinical assessment and Dietary needs are assessed. The nutritional anaemias are discussed. Drug – nutrient interactions are analysed. Nutritional knowledge is applied to case study. Compared and contrasted nutrition in special patient groups. Nutrient requirements in relation to exercise and various types of sport are discussed and compared. Efficacy and safety of ergonomic aids are investigated. Relationships between musculoskeletal diseases and nutrition (e.g. osteoporosis, gout, arthritis) are compared.

CLINICAL PHARMACOLOGY (PHRM411)

Contact time (hours per week)

Theory: 2 periods
Practical: none
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the module

Pass requirements: subminima

Year Mark	40%
Examination Mark	50%
Final Mark	50%

Topics Covered

General aspects of drug therapy : Definitions, terminology, drug nomenclature and basic legislation are explained. Pharmacological terms used are defined and differentiated. **Pharmacokinetics :** The effect of the body on the drug with time are discussed - the absorption, distribution, biotransformation and excretion of drugs and the factors that influence these processes are discussed. **Pharmacodynamics:** The effects of the drugs on the body are explained – both non-specific effects of drugs as well as the mechanism of drug receptor interaction is described. Various forms of agonist and antagonist relationships are discussed. Exceptional cases of pharmaodynamics are explained. **Administration of drugs to patients :** The various dosage forms are described and the different ways drugs are administered are detailed. Dosage adjustments for children, babies and impaired liver and renal function must be calculated. Plasma half-life, therapeutic indices, steady state drug concentrations, loading and maintenance doses are explained. **Adverse effects of drugs :** Various types of side effects, toxic effects, hypersensitivity reactions and drug dependencies are described. The commonly occurring drug interactions are highlighted. Commonly encountered examples of drugs which cause toxic effects are introduced. **Autonomic, Somatic and Sensory Nervous systems :** Sympathetic and parasympathetic systems are described. Noradrenaline, the receptors alpha and beta and the effects of sympathetic stimulation are explained. The actions of acetylcholine on muscarinic and nicotinic receptors are explained. Direct and indirect agonists and antagonists of sympathetic and parasympathetic nervous systems are described. Physiology of neuromuscular junction and mechanism of drugs acting at the neuromuscular junction are described. Mechanism, effects and methods of administration of local anaesthestics are explained. **Antimicrobials and other anti-infectives :** Various terms e.g. toxicity, resistance, bacteriostatic and bactericidal are explained. Commonly used antiseptics and disinfectants are highlighted. Dermatological antimicrobials are detailed. Antimicrobials for systemic use with reference to the major drug classifications, examples, mechanisms of action, common

therapeutic uses, significant side effects, indications and contraindications are explained. The main groups of fungi are described and pharmacological action of antifungal agents are discussed. The TB drug regimens and the drugs used in TB protocol are discussed with their adverse effects. MDR and XDR TB are also highlighted. Leprostatics and drug regimens for leprosy are explained. Antivirals and antiretrovirals are discussed together with their mechanisms of action, side effects and drug interactions. The post exposure prophylaxis regimen is also explained. Protozoal infections, causes of malaria and pharmacological intervention of malarial infections are described. Ectoparasites and drugs used to combat worm infestations are highlighted. **Drugs affecting the CNS :** The benzodiazepines used for the treatment of sleep disorders and anxiety states are described, together with other therapeutic uses and adverse effects. The barbiturates are mentioned together with their relative safety vs benzodiazepines. Schizophrenia, classification and mechanism of action and adverse effects of neuroleptics are described. Affective disorders are explained and mechanisms of action of antidepressants are described. Epilepsy and the mechanism of antiepileptic drugs in control of seizures are described. Parkinsonism and the pharmacological action of drugs used are described. The various antiemetics and their actions and uses are discussed. Pharmacological action of general anaesthetic agents and their method of administration are explained. The pharmacological actions of opioid analgesics particularly on the CNS and the GIT are described. **Drugs affecting the CVS :** The Mechanism of action of ACE inhibitors, Angiotensin II antagonists, beta-adrenoceptor antagonists and agonists, calcium channel blockers, diuretics, vasodilators, centrally acting drugs, digoxin and nitrates are described. The role of the above drugs in the management of arrhythmias, angina, hypertension, myocardial infarction and congestive cardiac failure are explained. Mechanisms of action of drugs in the treatment of arrythmias are discussed. **Haemopoetic drugs :** The different types of anaemias are discussed together with their pharmacological treatment. The pharmacological effect of iron preparations, vitamin B 12, folic acid and erythropoeitin are explained. Effects/action of anticoagulants e.g. warfarin and heparin, their indications and contraindications are explained. The antiplatelet drugs and thrombolytics are discussed. Both local and systemic haemostatic drugs are highlighted. Plasma substitutes and colloid solutions are described. Drugs used in the management of hyperlipoproteinaemia are detailed. **Analgesics and anti-inflammatories :** The production and biological effects of the eicosanoids are explained. The mechanism of action of non-steroidal anti-inflammatory drugs are described together with examples and characteristic adverse effects. Paracetamol's action is explained and compared and contrasted with NSAIDs. The treatment of both aspirin and paracetamol toxicity is discussed. Aspirin's unique pharmacological effects are explained. Selective COX 2 inhibitors and combination analgesics are highlighted. Treatment of gout and migraine are classified. The mechanism of action of steroidal anti-inflammatories

(corticosteroids) are described together with their therapeutic uses, adverse effects and effects of dosing and treatment withdrawal. **Hormones and Hormone antagonists:** The hormones vasopressin, oxytocin and prolactin are highlighted. The production of gametes and secretion of hormones by ovaries and testes are described. The mechanism of action and adverse effects of hormonal contraceptives are detailed. Treatment of hyper and hypothyroidism is discussed. Diabetes mellitus is explained and the mechanisms of action of antidiabetic agents are described. **Antihistamines :** The multipotency of antihistamines are described together with their therapeutic uses and adverse effects which are attributed to their affinities with the various receptors. Examples of sedating and non-sedating antihistamines are discussed. **Respiratory Drugs :** The pharmacological action and variation of cough remedies are discussed. Asthma is explained together with the specific roles of bronchodilators, glucocorticoids, ipratroprium bromide, leukotriene receptor antagonists and xanthenes. The management of acute severe asthma , chronic asthma and exercise induced asthma are discussed. Other respiratory diseases e.g. COPD, acute bronchitis and pneumonia are highlighted. **GIT Drugs :** The physiology of acid secretion is discussed. The mechanism of action of various ulcer healing drugs, protective factors and antacids are described. Drugs for the treatment of peptic ulcers and GORD are highlighted. Physiology of gastrointestinal motility and secretions is described together with the pharmacological management of constipation and diarrhoea. Inflammatory bowel diseases and their drug management are explained. **Poisoning and emergency drug treatment :** Non- pharmacological as well as specific pharmacological treatments of poisoning are discussed. Common poisons are highlighted together with characteristic symptoms and antidotes. Drug treatment options for various emergencies are highlighted.

CONTEMPORARY SOCIAL ISSUES IN SOUTH AFRICA (CSIC101)

Contact time (hours per week)

Theory: 2 periods
Practical: none
Tutorial: 1 period

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark 50%

Final Mark 50%

Topics Covered

Social issues and their manifestation in the South African context. A selection of the following (or relevant clusters thereof) should be used as per currency: Violence and sexual violence, HIV/AIDS, Diversity and racism, Xenophobia, Urbanisation, Poverty, Education, Unemployment, Health issues, Substance abuse, Crime, Gangsterism, Sex work, Children on the streets, Inadequate housing, Bullying, Child-headed households, Child abuse, Family violence, Social transition including democracy and citizenship, Human trafficking, Teen pregnancy, Child labour, Suicide and self-harm, Consumerism and materialism, Technology – e.g. cyber bullying.

CORNERSTONE (CSTN101)

Contact time (hours per week)

Theory: 2 periods
Tutorial: 2 periods

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark 50%
Final Mark 50%

Topics Covered

The module content will be developed around the concept of journeys, across time, across space, and across human relationships; the first use of the concept will take the journey of the uMngeni River (which is close to all DUT campuses) as a metaphor. The module will bring different disciplinary perspectives to this content. The module will start with the analysis of a particular issue or metaphor (one critical event or development will be and analysed; the event in focus will be selected on the basis of its connections to the theme of journeys and its relevance to the issues of ethics, diversity and critical citizenry). The final section of the module will identify and integrate learning from earlier sections, and examine implications for further learning. At each stage of the module, students will be required to engage in activities that involve reflection and build communicative practices. There will be a concluding section in which students will identify their learning and examine the implications for their roles as students and as citizens.

CULTURAL DIVERSITY (CLDV101)

Contact time (hours per week)

Theory: 1 period
Tutorial: 1 period

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%
Final Mark	50%

Topics Covered

The module will be introduced by defining culture and establishing the salience of culture in the local and global context. There is also some attention paid to diverse cultural groups in the SA and global context. The core content focuses on aspects of social responsibility and gives strong attention to issues of anti- discriminatory and anti-oppressive practices. Social justice is unpacked and the effect of marginalization on oppressed groups discussed. Consciousness raising and social action and dialoguing across differences is used to interweave the introductory and main aspects of the module. It forms an appropriate way to conclude the module as it requires students to engage in activities that involve reflection and personal commitment to anti-oppressive practices.

DIAGNOSTIC IMAGING I (DGNT221)

Contact time (hours per week)

Theory: 1 period
Practical: 2 periods
Tutorials: none

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%

Final Mark 50%

Topics Covered

The following terms are defined and described (in the context of the human body): Projection procedures (viz. basic projection, patient/part position, collimation, marker, bucky, tube). Patient procedures (breathing instruction). Patient position (posteroanterior (PA), anteroposterior (AP), lateral – right and left (RL/LL), anterior obliques (right and left – RAO/LAO), posterior obliques (right and left – RPO/LPO), upright or erect, recumbent – right or left, seated and specialist views). Terms are defined, identified and described (including but not limited to): Normal and abnormal alignment. Normal and abnormal bone structure. Normal and abnormal cartilaginous and soft tissue changes (viz. calcifications). The basic projections for the various regions of the body are stated and described (including but not limited to): Cervical series, Thoracic series, Lumbar series, Chest (viz. PA and lateral), Abdomen (viz. AP), Pelvis (viz. AP). Shoulder series, Elbow series, Hand and wrist series, Hip series, Knee series, Ankle series, Foot series, TMJ series, Skull series and Miscellaneous projections (long bones). Shoulder series, Elbow series, Hand and wrist series, Hip series, Knee series, Ankle series, Foot series, TMJ series, Skull series and Miscellaneous projections (long bones). The significant and relevant normal radiographic anatomy, especially bone and soft tissue structures in all the basic views are identified. The regional abnormalities and age related changes (pediatric and geriatric) are radiographically described (e.g. degenerative joint disease, congenital anomalies, trauma). The 3 main components of a radiology report are applied in the context of the reporting radiographs. Utilise the ABCS (alignment, bone, cartilage, soft tissue) method for reporting on views related to the extremities and TMJ and skull. Describe and state the significance of measurements, lines and spaces found or measured on radiographs. The following (including and not limited to) measurements, lines and spaces are described and their significance is stated : in the cervical spine (viz. cervical lordosis, McGregor's line, Chamberlain's line, George's line, atlantodental interspace (ADI) in children and adults, prevertebral spaces). in the thoracic spine (viz. thoracic kyphosis, thoracic cage dimension). in the lumbo-pelvic region (viz. pre-rectal space, coxa vara and coax valga, Shenton's line, Iliofemoral line, protrusio acetabuli, Klein's line, lumbar lordosis, lumbosacral angle, sagittal canal measurement). Shoulder series, Elbow series, Hand and wrist series, Hip series, Knee series, Ankle series, Foot series, TMJ series, Skull series and Miscellaneous (long bones) series.

DIAGNOSTIC IMAGING II (DGNT331)

Contact time (hours per week)

Theory: 2 periods

Practical: 3 periods
Tutorials: none

Assessment
Continuous assessment

Pass requirements: subminima
Year Mark	50%
Final Mark	50%

Topics Covered
Fundamentals and Introductory Concepts. Radiography of: Upper Limb and Shoulder Girdle. Lower Limb and Pelvic Girdle and Hip, Chest, Thorax, Abdomen, Skull and Vertebral Column Introduction to musculoskeletal imaging using the following imaging modalities: Magnetic resonance imaging. Computerised tomography. Ultrasound imaging. Nuclear medicine.

DIAGNOSTIC IMAGING III (DGNT141)
Contact time (hours per week)
Theory: 2 periods
Practical: 4 periods
Tutorial: as required

Assessment
Continuous assessment

Pass requirements: subminima
Year Mark	50%
Final Mark	50%

Topics Covered
The following diagnostic imaging techniques are described and their significance is stated (including but not limited to) plain film x-rays, arthrography, bone scans, ultrasound, CT (computed tomography) and MRI (magnetic resonance imaging) scans as well as PET scans and bone densitometry (e.g. DEXA) scans. Apply practical skills and knowledge of the principles of plain film radiography of the skeletal system, chest,

and Abdomen. Critically evaluate the appropriateness of the requested views in the context of the patient history. Demonstrate the fundamentals and introductory concepts of positioning techniques (normal series and stress views) and their applications. Demonstrate appropriate patient interactions before, during and after the radiographic procedures. Demonstrate the safe use of radiographic equipment to effectively produce the required radiographic images. Reduce the impact of artefact production when taking radiographs (e.g. clothing or other artefact producers). Identify contra-indications to radiographic procedures. Calculate radiation doses to obtain an optimal radiographic image. Demonstrate theoretical and practical knowledge of the full radiographic technique (e.g. labelling, exposure factors) as applied to perform radiography of the appendicular and axial skeleton (normal series and stress views (where applicable)), chest, abdomen and pelvis (normal series) of patients. Evaluate the components of the radiographic imaging processing, including but not limited to darkroom techniques and digital formats, as well as their related quality assurance processes. Evaluate the radiographic image in terms of the exposure factors in order to determine whether an optimal radiographic image has been obtained or not.

DIAGNOSTICS IA (DINT311)

Contact time (hours per week)

Theory: 4 periods
Practical: 3 periods
Tutorials: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Demonstrate a comprehensive knowledge of the clinically relevant diagnostic principles and pathological procedures (special investigations included) based on an integrated systemic pathology, diagnostics and orthopedic assessment principles of the human frame in terms of normal and abnormal findings in terms of: - The general concepts of clinical pathology are described and analysed. - Components of the case

history are identified, described and analysed. General features of disease, including weight loss and pyrexia of unknown origin are described and explained. The Aetiology, Clinical features, Complications, Differential diagnosis, Investigations, Management protocols and Prognoses of diseases related to the : Skin, Blood vessels, Heart , Haematopoietic and Lymphoid system, Lungs and Upper Respiratory tract, Kidneys and collecting system are described, analysed. Case histories related to the systems mentioned in above of the human body are analysed and evaluated to arrive at the appropriate differential diagnosis. Relevant patho – physiology, anatomy and histology is discussed and described with reference to the clinical features of the diseases of the systems mentioned aboveSpecial investigations and results thereof - such as: CT's, MRI's, angiograms, lumbar punctures, ECG's, EEG's, blood and biochemistry analysis, ultrasound, arterial blood gases, lung volume assessment, biopsy, barium studies, endoscopy, stool cultures, urine cultures, cystograms and others pertinent to the condition relevant to the system (above), will be described, analysed.

DIAGNOSTICS IB (DINT321)

Contact time (hours per week)

Theory: 4 periods
Practical: 3 periods
Tutorials: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Demonstrate a comprehensive knowledge of the clinically relevant diagnostic principles and pathological procedures (special investigations included) based on an integrated systemic pathology, diagnostics and orthopedic assessment principles of the human frame in terms of normal and abnormal findings in terms of: The general concepts of clinical pathology are described and analysed. Components of the case history are identified, described and analysed. General features of disease, including weight loss and pyrexia of unknown origin are described and explained. The Aetiology,

Clinical features, Complications, Differential diagnosis, Investigations, Management protocols and Prognoses of diseases related to the : Gastrointesinal tract, Liver, Biliary tract, Pancreas, Musculoskeletal system (with emphasis on low back pain and causes of low back pain), Nervous system, Endocrine system, Female genital system and breast, Male genital system are described, analysed. Case histories related to the systems mentioned in above of the human body are analysed and evaluated to arrive at the appropriate differential diagnosis. Relevant patho – physiology, anatomy and histology is discussed and described with reference to the clinical features of the diseases of the systems mentioned above. Special investigations and results thereof – such as: CT's, MRI's, angiograms, lumbar punctures, ECG's, EEG's, blood and biochemistry analysis, ultrasound, arterial blood gases, lung volume assessment, biopsy, barium studies, endoscopy, stool cultures, urine cultures, cystograms and others pertinent to the condition relevant to the system (above), will be described, analysed.

DIAGNOSTICS IIA (DINT411)

Contact time (hours per week)

Theory: 2 periods
Practical: 4 periods
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Apply a comprehensive knowledge of the clinically relevant diagnostic principles and pathological procedures (special investigations included) based on an integrated systemic pathology, diagnostics assessment principles of the human frame in terms of normal and abnormal findings in terms of: The general concepts of clinical pathology are described and analysed. Components of the case history are identified, described and analysed. General features of disease, including weight loss and pyrexia of unknown origin are described and explained. The Aetiology, Clinical features, Complications, Differential diagnosis, Investigations, Management protocols and Prognoses of diseases

of the human body. Complete comprehensive case histories related to the systems mentioned in above of the human body are analysed and evaluated to arrive at the appropriate differential diagnosis. Appropriate special investigations are identified and results thereof - such as: CT's, MRI's, angiograms, lumbar punctures, ECG's, EEG's, blood and biochemistry analysis, ultrasound, arterial blood gases, lung volume assessment, biopsy, barium studies, endoscopy, stool cultures, urine cultures, cystograms and others pertinent to the condition relevant to the system (above), will be described, analysed. Develop based on a patient work up, an appropriate and defendable patient management programme

DIAGNOSTICS IIB (DINT421)

Contact time (hours per week)

Theory: 2 periods
Practical: 4 periods
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Apply a comprehensive knowledge of the clinically relevant diagnostic principles and pathological procedures (special investigations included) based on an integrated systemic pathology, diagnostics assessment principles of the human frame in terms of normal and abnormal findings in terms of: The general concepts of clinical pathology are described and analysed. Components of the case history are identified, described and analysed. General features of disease, including weight loss and pyrexia of unknown origin are described and explained. The Aetiology, Clinical features, Complications, Differential diagnosis, Investigations, Management protocols and Prognoses of diseases related to the human body.Complete comprehensive case histories related to the systems mentioned in above of the human body are analysed and evaluated to arrive at the appropriate differential diagnosis. Appropriate special investigations are identified and results thereof - such as: CT's, MRI's, angiograms, lumbar punctures,

ECG's, EEG's, blood and biochemistry analysis, ultrasound, arterial blood gases, lung volume assessment, biopsy, barium studies, endoscopy, stool cultures, urine cultures, cystograms and others pertinent to the condition relevant to the system (above), will be described, analysed. Develop based on a patient work up, an appropriate and defendable patient management programme

ENTREPRENEURIAL EDGE (TENE101)

Contact time (hours per week)

Theory: pending 2022
Practical: pending 2022
Tutorial: pending 2022

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%
Final Mark	50%

Topics Covered

BECOMING AN ENTREPRENEUR : Understanding yourself, What kind of business will suite me best, A vision for the business, Why become an entrepreneur, Who are entrepreneurs, Entrepreneurial Resources, Entrepreneurial myths, Entrepreneurial transition. ADDRESSING RISK : Risks the banks are concerned with, From the perspective of the bank, Risks and interest rates, Researching to reduce my risks, Understanding my risks and prospects, Problem solving, Competitive advantage, Business successes and failures. UNDERSTANDING MY MARKET : What does my market look like, Sharing the market, Competitors, Suppliers, Customer Relations Management. PLANNING : The environment, Strategic planning, Operation al planning, Types of plans, Setting the business vision, Determining the business mission, Setting business objectives, Finding and evaluating suppliers. FINANCIAL OBJECTIVES : Costing a product / service, Funding the business. MARKETING : What you should now about products and services, Considering the price, Finding the proper location, What to consider when advertising and doing promotions. ETHICS AND SOCIAL RESPONSIBILITY : Considering ethical issues to address, Drawing up an ethics standard, Being held ethically responsible, Being responsible to your stakeholders.

EQUALITY AND DIVERSITY (EQDV101)

Contact time (hours per week)

Theory: 1 period
Tutorial: 1 period

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%
Final Mark	50%

Topics Covered

Concepts and terminology – e.g. diversity, equality, inclusion, power, oppression. Parameters of diversity as listed in section 9 of the SA Constitution. Prejudice, discrimination and inequality. The diversity competence continuum. Steps to develop competence/sensitivity in relation to diverse others. Selected topics.

GENERAL PATHOLOGY (GEPA201)

Contact time (hours per week)

Theory: 4 periods
Practical: none
Tutorial; as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	40%
Examination Mark	50%
Final Mark	50%

Topics Covered

Introduction to Pathology and Disease, Disease at cellular level: cell injury, death,

necrosis, Amyloid, Calcification, Pigmentation, Jaundice, Fluid disturbances (oedema and electrolyte imbalances), Haemodynamic derangements (hyperaemia, congestion, haemorrhage, thrombosis, embolism, infarction), Inflammation, healing and repair, Infection and diseases, Disorders of growth and neoplasia, Genetic diseases, Disorders of Carbohydrate metabolism, Nutritional disorders, Effect of radiation, Autoimmune disorders.

GROSS ANATOMY IA (ANGR111)

Contact time (hours per week)

Theory: 4 periods
Practical: 3 periods
Tutorials: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	40%
Final Mark	50%

Topics Covered

Introduction to anatomy (practical) : How to dissect; Anatomical and medical terminology; Histology; Thorax. **The thoracic framework :** The following bones will be discussed in terms of their orientation, muscles that attach to parts of each bone, and anatomical features: sternum, ribs – typical, atypical, classification, clavicle, scapula, thoracic vertebrae – typical, atypical. The joints of the thoracic cage will be classified. **Surface anatomy of the anterior thoracic wall :** Anatomical lines and planes and quadrants, Soft tissue landmarks, Location of bony prominences, The great vessels and location of clinically important vessels and nerves, The location and extent of the lungs and pleura, The heart. **The Breast :** Location and extent of the female breast, External appearance and anatomy, variations, clinical considerations, Internal anatomy, Blood supply (arteries and veins) and lymphatic drainage. **Muscles of the anterior thoracic wall :** The following muscles associated with the thoracic wall will be considered and described in terms of their attachments, action and nerve supply: Pectoralis major, pectoralis minor, serratus anterior, subclavius, intercostal muscles – external, internal and innermost. The following muscles associated with the thoracic wall will be considered due to their attachments to bones associated with the thorax. However, they will not be considered in detail: sternocleidomastoid, scalenus anterior,

sternohyoid and sternothyroid, deltoid, lattisimus dorsi. **Understanding the innervation of the thorax :** The purpose of this lecture is to provide an overall understanding of the different types of nerves situated in the thorax, their location, function and association with each other. The following nerves will be considered: phrenic nerve, vagus nerve, thoracic sympathetic chain, intercostal nerves. **Blood supply to the thoracic walls :** The arterial supply of the anterior thoracic wall – the internal thoracic artery and branches, The arterial supply of the posterior thoracic wall – the thoracic aorta and its branches. **The anatomic basis for the mechanism of respiration :** The action of the intercostals muscles; The action of the diaphragm, The accessory muscles that aid respiration. **The pleura and its relationship to the internal thoracic walls :** Differentiation between the parietal and visceral pleura, The attachments of the parietal pleura and nerve supply. **The anatomy of the lungs :** The location of the lungs, Surface anatomy of the lungs, Gross anatomical features – borders, surfaces, lobes, Basic embryology of the lungs, Bronchopulmonary segments – significance and segmental pattern, Impressions on left and right lungs – medial, lateral surfaces, diaphragmatic and apex, Structures at the root of the lung – location in relation to each other. **The pericardium :** Differentiation between layers of pericardium, Attachments of the pericardium, Nerves and blood vessels associated with the pericardium. **The anatomy of the heart :** Orientation of the heart, Basic anatomy of the heart, Location and surface anatomy of the heart, valves and great vessels, The chambers of the heart – gross anatomical features of the external and internal aspects of the right and left atria and ventricles, The valves of the heart – right and left atrio- ventricular, pulmonary and aortic valves –basic features, auscultation areas and basic functioning. **The blood vessels of the heart :** The left and right coronary systems, The course and distribution of the main coronary branches – right, left, anterior and posterior interventricular and circumflex arteries, The location of the cardiac veins. **The mediastinum :** Defining the divisions of the mediastinum – anterior, posterior, inferior, superior, middle, List of contents of each division. **The oesophagus and trachea :** Location and relations of the oesophagus, Location and relations of the trachea – including anatomy of the left and right bronchi, Oesophageal constrictions. **The azygos system of veins and the thoracic duct :** Pattern of drainage of the azygos system, Course and relations of the thoracic duct. **The thoracic sympathetic chain, vagus and phrenic nerves :** Location and branching pattern of the sympathetic chain – splanchnic nerves, visceral contributions to the cardiac and pulmonary plexus, thoracic ganglia, Course and relations of the left and right vagus nerves in the thorax, Course, relations and distribution of the phrenic nerve.

GROSS ANATOMY IB (ANGR121)

Contact time (hours per week)

Theory: 4 periods
Practical: 3 periods
Tutorials: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	40%
Final Mark	50%

Topics Covered

Introduction to anatomy (practical) : 1. Abdomen, 2. Pelvis/perineum. **Muscles of the anterior abdominal wall (AAW) :** The muscles of the anterior abdominal wall identified. The attachments of each of the muscles and their arrangement on the anterior wall are described. The action and innervation of each of the AAW muscles are described. **Applied anatomy of the anterior abdominal wall :** The referral pain patterns on the AAW described. **Inguinal Region – inguinal canal, contents, hernias :** The inguinal region is identified. The boundaries of the inguinal canal are described. The contents of the inguinal canal are listed. The mechanisms of inguinal hernias are discussed and the types of hernias are identified and explained. **Peritoneum and peritoneal cavity :** The different layers of the peritoneum are distinguished between. The disposition of the peritoneum is described. The parts of the peritoneum are described. **The liver and gall bladder :** The peritoneal location of the liver and gall bladder are described. The surface anatomical location of the liver and gall bladder are described. The peritoneal attachments of the liver are described. The quadrants of the liver are described. The relations of the vessels to the liver and gall bladder are understood and explained. The features and impressions on the visceral surface of the liver are described. **The stomach :** The peritoneal location of the stomach is described. The surface anatomical location of the stomach is described. The features of the stomach are described. The peritoneal attachments of the stomach are described. The arterial supply to the stomach is described. The visceral relations of the stomach are explained. **The spleen and pancreas :** The peritoneal location of the spleen and pancreas is described. The surface anatomical location of the spleen is described. The diaphragmatic and visceral surfaces of the spleen are distinguished

between. The peritoneal relations of the spleen and pancreas are described. The relations of and arterial supply to the pancreas are described. **Duodenum, jejunum and ileum :** The parts and relations of each of the parts of the duodenum described. The differences between the jejunum and ileum are identified. The arterial supply and venous drainage of the small intestine are described. **The colon :** The features of the colon are identified. The arterial supply and venous drainage of the colon are described. The anatomy of the caecum and appendix are described. **Posterior abdominal wall-viscera, nerves, vessels and muscles :** The attachments and action of each of the muscles of the posterior abdominal wall are described. The branches of the lumbar plexus are described in terms of their anatomical location, course and distribution. **The thoracic diaphragm :** The attachments of the thoracic diaphragm are identified and described. The innervation of the thoracic diaphragm is described. The openings of the thoracic diaphragm and the structures that pass through each opening are described. **The kidneys, ureter and suprarenal glands :** The peritoneal locations of the kidneys are described. The surface anatomical location of the kidneys is described. The features of the kidneys are described. The suprarenal glands are briefly described in terms of anatomical features, vasculature and relations. The course and relations of the ureter in the abdomen are described. The structures at the hilum of the kidney are identified and described. The visceral relations of the anterior and posterior surfaces of each kidney are described. **The aorta and inferior vena cava :** The course and relations of the abdominal aorta and inferior vena cava (IVC) are described. The branches of the abdominal aorta are identified and described. The tributaries of the IVC are identified and described. **Autonomic nerves :** The arrangement and distribution of the autonomic nerves of the abdomino-pelvic cavity are briefly described. **Introduction to the pelvis and perineum :** Demarcation of the pelvis and pelvic cavity. Contents of the pelvis. Defining the perineum and its contents. Relationship between the abdominal and pelvic cavities. **The bony framework of the pelvic cavity :** Osteology – features of the bony pelvis. Joints of the pelvis – articulation, movements and supporting mechanisms. Anatomy of the sacro-Iliac joint. Differences between male and female pelves. **Clinical anatomy of the pelvic planes and regions :** Defining the areas of pelvic inlet and outlet. **The muscles of the walls and floor of the pelvis :** The muscles of the pelvic diaphragm. Urogenital diaphragm, obturator internus and piriformis. **The pelvic cavity and its contents :** Identifying the male and female internal reproductive organs - rectum, bladder. **Blood vessels and nerves of the pelvis:** Sacral plexus – origin, course and distribution of branches. Obturator nerve – course. Pelvic autonomic nerves. Internal iliac artery – course, branches and distribution. **Pelvic peritoneum :** Disposition of the pelvic peritoneum. Peritoneal pouches. Male and female sagittal sections. **The urinary system :** Location of the bladder. External and Internal features. Relations – visceral and peritoneal. Blood supply and innervation. Male and female urethra.

Female reproductive system : Uterus – location, gross features, relations, blood supply, lymphatic drainage. Supporting structures of the ovary, uterus and vagina. Uterine tubes - location, relations, gross features. **Male reproductive system :** Prostrate gland – location, lobes, arterial supply and venous drainage, lymphatic drainage. Seminal vesicles – location, blood supply, lymphatic drainage. **The rectum and anal canal :** Location and relations of the rectum (male and female). Peritoneal relations of the rectum. Blood supply – arteries, veins. Lymphatic drainage and Innervation. Internal anatomy of the anal canal. Arterial supply and venous drainage of anal canal. Internal and external anal sphincters **Perineum :** Perineal pouches. Ischioanal fossae and the pudendal canal. Arterial supply and Innervation of the perineum. Male and female external genitalia.

GROSS ANATOMY II (ANGR201)

Contact time (hours per week)

Theory: 2 periods
Practical: 3 periods
Tutorials: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	40%
Final Mark	50%

Topics Covered

Back *:* The vertebral column : bony landmarks, features of typical versus atypical vertebra, regional characteristics of vertebrae, ossification. Joints of the vertebral column : joints of vertebral bodies, joints of vertebral arches, Craniovertebral joints. Muscles of the back: Superficial muscles. Intermediate muscles. Deep muscles. Muscles of Suboccipital Region. Spinal cord and meninges. **Upper limb :** Osteology : Bony landmarks, muscle attachments, orientation. Axilla: Brachial plexus, Axillary artery and vein, Axillary lymph nodes. Arm: Muscular compartments, Cubital fossa, Neurovascular structures. Forearm: Muscular compartments, Neurovascular structures. Wrist and hand: Surface anatomy, Fascia of the palm, Muscles, Neurovascular structures. Joints: Shoulder joint, Elbow joint, Wrist joint, 1st Carpometacarpal joint. **Lower limb :** Osteology: Bony landmarks, muscle attachments, orientation. Gluteal region: bony landmarks, muscles, neurovascular

structures. Hip and thigh regions: Fasciae (superficial and deep) and associated structures. Muscular compartments: anterior, medial, posterior. Femoral triangle: boundaries, content, clinical significance. Adductor canal: boundaries, content, clinical significance. Popliteal fossa: boundaries, content, clinical significance. Joints. Leg: Crural fascia. Muscular compartments: anterior, lateral, posterior. Joints. Foot: Muscles, Deep fascia, Neurovascular structures, Arches, Joints.

HISTOLOGY (HIST111)

Contact time (hours per week)

Theory: 2 theory
Practical: 3 practical
Tutorials: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	40%
Final Mark	50%

Topics Covered

Epithelium / epithelial tissue, True connective tissues, Cartilage and bone, Blood, Muscular tissue, Nervous tissue, Integumentary system, Cardiovascular System, Lymphatic System, Respiratory System, Digestive System, Urinary System, Male Genital Tract, Female Genital Tract.

HIV AND COMMUNICABLE DISEASES (HCDK101)

Contact time (hours per week)

Theory: 2 periods
Practical: none
Tutorial: none

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%

Final Mark 50%

Topics Covered

Epidemiology of HIV, TB and STIs globally, in sub-Saharan Africa, South Africa and KZN. HIV infection, transmission and prevention. Two diseases one person. Psychological issues of HIV and TB: Decision making and family autonomy, Social isolation and stigma, Disclosure. Module structured around the themes below: Stigma – Impact on people infected and affected by HIV/AIDS, Disclosure – Understanding issues related to disclosure, Rights – Knowing your rights as people infected and affected by HIV/AIDS, Communication – Listening, speaking, writing effectively as people infected and affected by HIV/AIDS, Facilitation – Helping others learn about HIVAIDS, Advocacy – Working for change around HIV/AIDS.

IMMUNOLOGY, PARASITOLOGY AND COMMUNICABLE DISEASES (EPIP201)

Contact time (hours per week)

Theory: 3 periods
Practical: 3 periods
Tutorial: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark 40%
Final Mark 50%

Topics Covered

Immunology: Non-acquired body defences, Naturally acquired body defences: antigens and antibodies, artificially acquired body defences: immunisation, Allergy and auto-immune diseases. **Parasitology:** Introduction to parasitology. Protozoan parasites: classification, characterization, incidence, clinical features, investigations and prophylaxis and management. Platyhelmintic parasites: classification, characterization, incidence, clinical features, investigations and prophylaxis and management. Aschelmintic parasites: classification, characterization, incidence, clinical features, investigations and prophylaxis and management. The Arthropoda such as, but not limited to parasites, vectors and pests. **Communicable diseases:** The purpose of this module is to provide students with the skill to identify and understand the

processes, distribution and symptoms of a selection of commonly occurring communicable diseases. This module is designed to incorporate principles of epidemiology and knowledge of parasitology in order to understand the clinical presentation of a communicable disease. **Introduction :** Definition of a communicable disease. Discussion of communicable diseases within the context of epidemiology. Epidemiological characteristics of communicable diseases. Trends in geographic distribution of communicable diseases. **Pathophysiology, Anatomy and Physiology:** Diseases that affect the head and neck region, Diseases that affect the respiratory system, Diseases that affect the abdominal region and gastrointestinal system, Diseases that affect the circulatory system, Diseases that affect the urogenital system, Diseases that affect the central nervous system, The body's response mechanism to communicable disease. **National, Regional and Global trends:** Communicable diseases in South Africa Communicable diseases in Kwazulu-Natal, Global perspective on communicable diseases, Review of strategies for control of diseases. **Specific communicable disease:** The following list of communicable diseases will be discussed under the following headings: Definition of disease; Symptoms of disease; Key diagnostic features of disease; Prevalence of disease; Spread and control of infection - (brief discussion based on epidemiological principles); Treatment and prevention - brief discussion based on general pathology and pharmacological principles.

INFORMATION AND COMMUNICATION TECHNOLOGY LITERACY AND SKILLS (ICTL101)

Contact time (hours per week)

Theory: pending 2022
Practical: pending 2022
Tutorial: pending 2022

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%
Final Mark	50%

Topics Covered

Basics of ICTs Hardware, Software, and Users. Internet Search. Word Processing. Spreadsheets. Presentations. Referencing. Security, Legal, Ethical, and Societal Issues. Economics of ICTs.

INTERNATIONAL PERSPECTIVES AND PRACTICES OF HEALTH CARE SYSTEMS (IPPH411)

Contact time (hours per week)

Theory: 2 periods
Practical: none
Tutorial: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%
Final Mark	50%

Topics Covered

Overview and Terminology: Overarching perspectives in health care, globalisation and internationalisation, definitions. **Global health care systems:** Origins and history of health care, Differences in design and implementation of health care systems, western and traditional health care, collaborative and global strategies for health care, regional influences of climate, regional adaptations in access to health care and African exemplars of health care practices. **Health care workers in the international context:** health worker education and training, safety and protection, mobility and migration, investment in health workers, legal considerations. **Health care funding:** National funding models, IMF, World Bank, USAID etc. **Health care agencies:** WHO, Medicine Sans Frontiéres, Red Cross, Gift of the Givers, others. **Cultural diversity of health care:** Language, religion, philosophical beliefs. **Complex humanitarian emergencies: causes, determinants and response:** Natural disasters/hazards – famine, drought, outbreak of disease, seismic/volcanic activity, mudslides/avalanche, floods; Anthropogenic disasters/hazards – building/bridge collapse, nuclear accidents, mining, environmental pollution, landfill sites; war conflict – civil strife war, national war, political instability/uprising/revolt, religious strife, ethnic violence.

ISIZULU FOR HEALTH CARE PROFESSIONALS (IZHP101)

Contact time (hours per week)

Theory: 2 periods
Practical: none
Tutorials: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%
Final Mark	50%

Topics Covered

Cultural and historic background of the Zulus, Grammar: pronunciation, nouns, verbs, classification nouns, concords. Days of the week, counting 1-10, months of the year, colours and shapes. Anatomical body parts. **Greetings:** greeting different people, figures, and members of society, family and use of different titles. **Conversing:** asking how the other person is doing and responding back as to how you are doing. Deep understanding of different responses and cultural etiquette. **Personal details:** name, surname, location, occupation, age, marital status and dependants. **Basic instructions** to patients/clients.

ISSUES OF GENDER AND SOCIETY WITHIN HEALTH CARE (IGSH101)

Contact time (hours per week)

Theory: 2 periods
Practical: none
Tutorial: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%
Final Mark	50%

Topics Covered

Gender and related concepts: gender power relations, gender roles, manifestation of gender bias, gender as one of the many social determinants of health. The effects of gender discrimination on health matters of the individual. Effective communication with patients in a health care setting, demonstrating an awareness of the practitioner-patient power differential and gender and cultural differences. The impact of health care delivery systems in relation to gender. The workplace impact of gender-based societal and cultural roles and beliefs on health care practitioners.

LEADERSHIP AND SUPERVISORY DEVELOPMENT (LDSD101)

Contact time (hours per week)

Theory: pending 2022
Practical: pending 2022
Tutorial: pending 2022

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%
Final Mark	50%

Topics Covered

Leaders verses Managers. Qualities of a leader. Leadership styles. Concepts of leadership. Climate and Culture of leadership. Leadership Theories. Conflict Management; Diversity. Leadership Development

MYOFASCIAL AND ADJUNCTIVE THERAPIES I (MYAT311)

Contact time (hours per week)

Theory: 2 periods
Practical: 4 periods
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Myofascial pain syndromes – Spine related. All principles associated with myofascial pain and dysfunction (respective trigger points) are described and explained in terms of the following: Characteristics, Identification, Diagnosis, Treatment, Management and Corrective actions. Principles associated with the diagnosis and treatment of myofascial pain and dysfunction syndromes of certain muscles are described under the following headings: Muscle attachments (reviewed), Muscle innervation (reviewed), Muscle function (myotatic units), Referred pain pattern, Corrective actions, Activation of trigger points, Associated symptoms, Needling techniques, Spraying techniques, Stretching techniques, Other techniques as pertains to specific muscles. The management of myofascial pain syndromes are described in terms of the: Indications, Contra-indications, Precautions, Co-usage with other modalities, Technical application of the various modalities (frequency, intensity, duration etc.). Including, but not limited to the: Electrotherapy (IFC, TENS, therapeutic ultrasound, APR, APS, or alternative modality as is pertinent at that time), Massage, Muscle manipulation techniques, Heat Therapy, Cryotherapy, Hydrotherapy, Traction, Acupuncture, Meridian therapy, Actinotherapy, Dry needling, Bio-feedback, Stress management and Other adjunctive techniques relevant to the treatment of disorders of the relevant myofascial structures, are described and compared and contrasted. General principles associated with myofascial pain and dysfunction (respective trigger points) are demonstrated and elicited on patients in terms of the following: Characteristics, Identification, Diagnosis, Treatment, Management and Corrective actions. Principles associated with the diagnosis and treatment of myofascial pain dysfunction syndromes of certain muscles is identified on peers / models / on charts / pictures and / or slides under the following headings: Muscle attachments (review), Muscle innervation (review), Muscle function (myotatic units), Referred pain pattern, Corrective actions, Activation of trigger points, Associated symptoms, Needling techniques, Spraying techniques, Stretching techniques, Other techniques as pertains to specific muscles. The management of myofascial pain syndromes are applied clinically with due concern for : Indications, Contra-indications, Precautions, Co-usage with other modalities, Technical application of the modality (frequency, intensity, duration etc.). And with respect to the following

modalities: Electrotherapy (IFC, TENS, therapeutic ultrasound, APR, APS, or alternative modality as is pertinent at that time), Massage, Muscle manipulation techniques, Heat Therapy, Cryotherapy, Hydrotherapy, Traction, Acupuncture, Dry needling, Bio-feedback, Stress management, and other adjunctive techniques relevant to the treatment of disorders of the relevant myofascial structures, are described, compared and contrasted. The appropriate myofascial and adjunctive therapies are correctly applied to the patient for the presenting condition, in the clinical setting.

MYOFASCIAL AND ADJUNCTIVE THERAPIES II (MYAT411)

Contact time (hours per week)

Theory: 2 periods
Practical: 2 periods
Tutorial: as required

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Myofascial pain syndromes – Extremity related. All principles associated with myofascial pain and dysfunction (respective trigger points) are described and explained in terms of the following: Characteristics, Identification, Diagnosis, Treatment, Management and Corrective actions. Principles associated with the diagnosis and treatment of myofascial pain and dysfunction syndromes of certain muscles are described under the following headings: Muscle attachments (reviewed), Muscle innervation (reviewed), Muscle function (myotatic units), Referred pain pattern, Corrective actions, Activation of trigger points, Associated symptoms, Needling techniques, Spraying techniques, Stretching techniques, Other techniques as pertains to specific muscles. The management of myofascial pain syndromes are described in terms of the: Indications, Contra-indications, Precautions, Co-usage with other modalities, Technical application of the various modalities (frequency, intensity, duration etc.). Including, but not limited to the: Acupuncture and variations of acupuncture applications, Meridian therapy, Dry needling, Bio-feedback, Stress

management, Others as relevant, Review of modalities covered in Myofascial and Adjunctive Therapies I. General principles associated with myofascial pain and dysfunction (respective trigger points) are demonstrated and elicited on patients in terms of the following: Characteristics, Identification, Diagnosis, Treatment, Management and Corrective actions. Principles associated with the diagnosis and treatment of myofascial pain dysfunction syndromes of certain muscles is identified on peers / models / on charts / pictures and / or slides under the following headings: Muscle attachments (review), Muscle innervation (review), Muscle function (myotatic units), Referred pain pattern, Corrective actions, Activation of trigger points, Associated symptoms, Needling techniques, Spraying techniques, Stretching techniques, Other techniques as pertains to specific muscles. The management of myofascial pain syndromes are applied clinically with due concern for : Indications, Contra-indications, Precautions, Co-usage with other modalities, Technical application of the modality (frequency, intensity, duration etc.). And with respect to the following modalities: Acupuncture and variations of acupuncture applications, Meridian therapy, Dry needling, Bio-feedback, Stress management, Others as relevant, Review of modalities covered in Myofascial and Adjunctive Therapies I and other adjunctive techniques relevant to the treatment of disorders of the relevant myofascial structures, are described, compared and contrasted.

PHILOSOPHY AND HISTORY OF MEDICINE (PAHM111)

Contact time (hours per week)

Theory: 2 periods
Practical: none
Tutorial: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%
Final Mark	50%

Topics Covered

The history of healing in terms of Western, Eastern and African traditions and cultures is explained and compared. The development of medicine is compared and contrasted. “Wellness” and its integral relationship to healthcare are described. The concepts of “Reductionism” and “Holism” are compared and contrasted in the medical contexts.

Within the scientific method, methods, referencing technique and plagiarism are identified and discussed. The current debates on the future trends of healthcare are analysed. The generalist and specialist schools of thought are described and defended. The demographics of patients is described and related to the above. Inductive and deductive reasoning will be compared and contrasted. Kuhn's view of scientific change is described with relevance to the health care. Popper's view of science is described with respect to its effect on positivist science and medical research. Other prominent philosophers' approaches to science and research will be analysed. Self-awareness is demonstrated through discussion and interaction with peers (this may be personal, professional and social interaction). The ecosystemic paradigm is applied to the context of the self and other. Theories applied : Constructs such as Realism, Empiricism, Rationalism, Anti-realism, Positivism, Logical Positivisism. Sociological constructs as they impact on the delivery of medical care. Medical models / paradigms (e.g. Biomedical Model, Biopsychosocial Model). The self is understood within a multicultural society. Sensitivity for cultural norms and values is developed in terms of the self.

PHYSICS 101 (PHYS101)

Contact time (hours per week)

Theory: 2 periods
Practical: 2 periods
Tutorial: 2 periods

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	40%
Examination Mark	50%
Final Mark	50%

Topics Covered

MECHANICS: Fundamental Units & Dimensional Analysis, Vectors and Scalars, One Dimension Kinematics, Newton's Laws of Motion, Work, Energy & Power Impulse and Momentum, Rotational Dynamics. **PROPERTIES OF MATTER:** Phases of Matter, Elasticity Density and Specific Gravity, Pressure in Fluids, Atmospheric Pressure and Gauge Pressure, Pascal's Principle, Buoyancy and Archimedes' Principle, Surface

Tension, Capillary Action, Viscosity, Poiseuille's Law.

PHYSICS 102 (PHYS121)

Contact time (hours per week)

Theory: 2 periods
Practical: 2 periods
Tutorial: 3 periods

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	40%
Examination Mark	50%
Final Mark	50%

Topics Covered

THERMAL PHYSICS: Temperature, Heat and Temperature Change, Thermal Expansion of Solids, Heat and Phase Change, Calorimetry, Heat Transfer Mechanisms. **WAVES & SOUND :** Oscillatory Motion, Wave Motion & Types of Waves, Frequency, Amplitude and Wavelength, Speed of Waves on Strings, Reflection of Waves, Sound Waves, Energy and Intensity of Sound Waves, Doppler Effect. **GEOMETRICAL OPTICS :** Reflection, Refraction & Snell's Law, Dispersion, Critical Angles & Total Internal Reflection, Images Formed by Plane Mirrors, Images Formed by Spherical Mirrors, Images Formed by Refraction: Thin Lenses. **ELECTRICITY& MAGNETISM :** Electric Charge, Insulators and Conductors, Charging by Friction, Conduction and Induction, Coulomb's Law, Electric Field & Electric Field Lines, Electric Current & Potential Difference, Resistance & Ohm's Law, Series & Parallel Circuits, Fundamentals of Magnetism. **RADIOACTIVITY & RADIATION :** Properties of Nuclei, Binding Energy, Decay Processes (Alpha, Beta & Gamma), Decay Constant & Half-Life, Activity, Medical Applications of Radioactivity, Biological Effects of Ionizing Radiation. **QUANTUM PHYSICS :** Blackbody Radiation and Plank's Hypothesis, Photoelectric Effect, Photons & Electromagnetic Waves, Wave Properties of Particles.

PHYSIOLOGY IA (PHGY111)

Contact time (hours per week)

Theory: 2 periods
Practical: 4 periods
Tutorial: as required

Assessment
Continuous assessment

Pass requirements: subminima
Year Mark	40%
Final Mark	50%

Topics Covered
Anatomy and physiology are defined. The relationships between anatomy and physiology are explained. **Cells and tissues:** The levels of structural organization that make up the human body are described. The eleven systems of the human body, the organs present in each, and their general functions are listed. The important life processes of the human body are listed and described in context. The concept of homeostasis is defined. The components of a feedback system are described with relation to their function. The operation of negative and positive feedback systems are compared and contrasted. The reasons for homeostatic imbalances in the causation of disorders are explained. The properties of water that makes it such a vital compound in the body are explained in the context of the human body. The term "electrolyte" is defined in relation to human physiology. The characteristics of acids and bases are compared and contrasted. The pH scale as well as where some of the body fluids fit into this scale is explained. Carbohydrates, lipids, proteins and nucleic acids in terms of their structure and functions in the body are tabulated in order to compare and contrast them. The different subgroups of carbohydrates, lipids, proteins and nucleic acids are listed and examples of these compounds are given. The term enzyme is defined and its role explained in the context of its function. The importance of ATP in the human body is discussed. The cell organelles are identified on a diagram. The cell organelles are described in terms of their structure and function. The different types of cells that form when cells diversify are listed. The structure and function of the plasma membrane is described. The processes that transport substances across the plasma membrane is described. The differences between active and passive transport processes are analysed. The term "gene" is defined in the context of its role in protein synthesis. The roles of DNA and RNA in protein synthesis are explained. The processes of transcription and translation are described in the context of protein synthesis. **Integumentary system:** The different types of body membranes are

described. A diagram of the skin is labelled noting its components. The various layers of the epidermis and dermis are described in terms of structure and function. The basis of skin colour is identified and explained. The functions of the skin are listed, with a reference to how the function is accomplished in the context of the physiological processes evident in the skin. The different types of glands found in the skin are compared and contrasted in terms of their structure and physiological function. **Muscular system:** Describe similarities and differences in the structure and function of the three types of muscle tissue and indicate where they are found in the body. Define and explain the role of the following: endomysium, perimysium, epimysium, tendon and aponeurosis. List the functions of muscle. List the three types of muscle. Describe the microscopic structure of skeletal muscle and explain the role of actin- and myosin-containing myofilaments. Describe how an action potential is initiated in a muscle cell. State the importance of the sarcoplasmic reticulum in muscle. Describe the structure of the neuromuscular junction in skeletal muscle. Name the neurotransmitter responsible for skeletal muscle contraction. Describe the sliding filament theory of muscle contraction. Explain what is meant by the term "graded responses" of skeletal muscle. Explain the effect of increased stimulus strength on muscle response. List the different sources of energy for muscle contraction. Explain when a muscle is fatigued.

PHYSIOLOGY IB (PHGY121)

Contact time (hours per week)

Theory: 2 periods
Practical: 4 periods
Tutorials: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	40%
Final Mark	50%

Topics Covered

Endocrine system: Define the terms hormone and target organ. Differentiate between endocrine and exocrine glands. Describe the two general mechanisms of hormonal action. Explain how various endocrine glands are stimulated to release their hormonal products. Define negative feedback and describe its role in regulating blood

levels of various hormones. List hormones produced by the endocrine glands and describe their location and general functions. Discuss ways in which hormones promote body homeostasis by giving examples of hormonal action. Describe the functional relationship between the hypothalamus and the pituitary gland. **Blood:** Identify the different blood cells and discuss their functions. Describe the functions of plasma. Describe the clotting pathway. Compare the different blood types and explain the consequences of incorrect blood type transfer. **Cardiovascular system:** Describe the location of the heart. Describe the coverings of the heart and explain the importance of the serous fluid present there. Describe the layers of the wall of the heart. Identify the major anatomical areas of the heart on a diagram. Describe the flow of blood through the chambers of the heart and through the systemic and pulmonary circulations. Describe the structure and function of the valves of the heart. Discuss the coronary circulation. Name the components of the intrinsic conduction system of the heart and describe the pathway of an impulse through this system. Define: systole, diastole, stroke volume, a cardiac cycle. Define heart sound and heart murmurs. Explain how heart rate is regulated. List the different types of blood vessels and state the functions of each. Describe the tunics of blood vessels. Compare arteries, capillaries and veins structurally. Define blood pressure and pulse and name several pulse points. **Immunity and the Lymphatic system:** Name the structures composing the lymphatic system and explain how the lymphatic system is functionally related to the cardiovascular and immune systems. Compare lymph capillaries and blood capillaries structurally. Describe the composition of lymph and explain its formation and transport. Describe the structure and function of lymph nodes, tonsils, the thymus, Peyer's patches and the spleen. **Respiratory system:** Identify, on a diagram, the structures forming the respiratory passageway from the nasal cavity to the alveoli of the lungs. Identify the functions of each respiratory system structure. Describe the structure and function of the lungs and the pleural covering. Describe the respiratory membrane. State the functions of macrophages and surfactant in the lungs. List and describe the four processes that are collectively called respiration. Describe the events that cause inspiration and expiration. Define the following respiratory volumes and capacities: tidal volume, vital capacity, expiratory reserve volume, inspiratory reserve volume and residual volume. Describe the exchange of oxygen and carbon dioxide in external and internal respiration. Explain how oxygen and carbon dioxide are transported in the blood.
Name the brain areas involved in control of respiration.

PHYSIOLOGY IIA (PHGG201)

Contact time (hours per week)

Theory: 4 periods

Practical: 2 periods
Tutorials: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	40%
Final Mark	50%

Topics Covered

Describe the structural and functional divisions of NS**.** Describe the structure of a neuron and explain the functional significance of its principal regions. Describe the locations and functions of the different types of supporting cells. Explain what is meant by the blood brain barrier and discuss its significance. Explain how a myelin sheath is formed. Describe this sheath of schwann cells and explain its role in the regeneration of cut peripheral nerve fibers. Define depolarization, repolarization& hyperpolarization. Describe the events that occur during the production of an action potential. Describe the properties of action potentials and explain the significance of the all-or-none law and the refractory periods. Explain how action potentials are generated along a myelinated and a nonmyelinated axon. Describe the role of Ach as a Neurotransmitter. Describe the transmission of electrical impulses along the Neuro-muscular junction. Describe the functioning of monamines as neurotransmitters. Describe the function of neuropeptides. Describe the function of Ventricles. Describe the major brain regions. Describe the organization of the cerebrum and the primary roles of its lobes. Describe the location and functions of the sensory cortex and motor cortex. Explain the lateralization of functions of the right and left hemispheres. Describe the different types of aphasias that result from damage to specific regions of the brain. Describe the structures involved in the limbic system and discuss the possible role of this system in emotion. Describe the diencephalons & explain their significance. Explain the role of the medulla oblongata in the control of visceral functions. Describe the structure of spinal cord and explain how ascending and descending tracts are named. Describe the origin and pathways of the pyramidal motor tracts and explain the significance of these descending tracts. Describe the structures and pathways involved in a reflex arc. Differentiate between somatic & autonomic motor reflex. Describe structure & functions of sympathetic & parasympathetic division. List & describe functions of the neurotransmitters of preganglionic & postganglionlic neurons of the sympathetic & parasympathetic systems. Describe the structural and functional relationships between sympathetic system and the adrenal

medulla. Distinguish between the different types of adrenergic receptors, give their anatomic locations. Explain the physiological and clinical significance of adrenergic receptors. Describe the 2 categories of cholinergic receptors. Describe the effects produced by stimulation of these receptors. Explain the antagonistic, complementary, and cooperative effects of sympathetic and parasympathetic innevation in different organs. Describe the higher neural control of the autonomic system. Give examples of different types of cutaneous receptors & describe the neural pathways for the cutaneous senses. Explain the purpose of pain. State the two types of pain. State the stimuli that excite pain receptors. Differentiate between the pathways that carry fast and slow pain. Describe the pain sensitive areas of the cranial vault. Differentiate between somatic, referred, visceral and phantom pain. Describe the structure and function of the olfactory receptors and explain how odor discrimination might be accomplished. Identify the functions of the different regions of the ear. Discuss in detail the functions of the organ of Corti. Describe the neural pathway of hearing. The nature of sound waves is explained. The effect of exposure to loud sounds is discussed. The physiology of hearing is explained. The auditory pathway is described. The age-related changes that occur in the eyes and ears are described. Describe the pathway of light into the eye. Discuss the structure and function of the retina. Describe the neural pathways from the retina, explaining the differences in pathways from different regions of the visual field. Discuss the defects of vision and hearing. Define the terms hormone and target organ. Distinguish between endocrine and exocrine glands. Describe how hormones can be classified according to their chemical composition. Explain how steroid and nonsteroid hormones can affect target cells. Describe the two general mechanisms of hormonal action. Discuss how negative feedback regulates hormone secretion. Discuss the ways in which various hormones promote body homeostasis. The locations of and relationship between the hypothalamus and pituitary glands is described. The location, histology, hormones and functions of the anterior and posterior pituitary is described. The “diabetogenic effect” of human growth hormone is discussed. The location, histology, hormones and functions of the thyroid gland is described. The formation of thyroid hormones and the control of their secretion is described. The location, histology, hormone and functions of the parathyroid glands is described. The location, histology, hormones and functions of the adrenal glands is described. The control of the secretion of aldosterone by the renin-angiotensin-aldosterone pathway is described. Congenital adrenal hyperplasia is described briefly. The location, histology, hormones and functions of the pancreatic islets is described. The regulation of the secretion of insulin and glucagon is described. The location, histology, hormone and functions of the pineal gland and thymus is described. The hormones secreted by cell in tissues and organs other than endocrine glands are listed, and their functions described. The actions of eicosanoids and growth factors are described. Describe the interaction of hormones during physical and psychological

stress. Outline the roles of various hormones in reproduction. The effects of aging on the endocrine system are described. Describe the different components of the CVS and its overall functions. Describe the composition of blood plasma and the classification of the formed elements of the blood. Describe the ABO system of red blood cell antigens and explain the significance of the blood types. Explain how a blood clot is formed and how it is ultimately destroyed. Discuss RBC formation and its destruction. Describe the path of the blood through the heart and function of the atrioventricular and semilunar valves. Describe the structures and pathways of the pulmonary and systemic circulations. Describe the structures and pathways of electrical impulse conduction in the heart. Describe the electrical activity in the sinoatrial node and explain why this tissue functions as the normal peacemaker of the heart. Relate the time involved in the production of an action potential to the time involved in the contraction of myocardial cells and explain the significance of this relationship. Describe the pressure change that occur in the ventricles during the cardiac cycle and release these changes to the action of the valves and flow of blood. Explain the origin of the heart sounds and state when these sounds are produced in the cardiac cycle. Explain how electrocardiogram waves are produced and relate these waves to other events in the cardiac cycle. Compare the structure of an artery and vein, and explain how the structure of each type of vessel relates to its function. Describe the structure of capillaries and explain the physiological significance of this structure. Describe the components and functions of the lymphatic system. Define cardiac output and explain how cardiac rate and stroke volume affect the cardiac output. Explain how autonomic nerves regulate the cardiac rate and the strength of ventricular contraction. Explain the intrinsic regulation of stroke volume (the Frank-Starling Law of the heart). List the factors that affect the venous return of blood to the heart. Explain how tissue fluid is formed and how it is returned to the capillary blood. Explain how oedema may be produced. Explain how antidiuretic hormone helps to regulate the blood volume, plasma osmolality, and the blood pressure. Explain the role of aldosterone in the regulation of blood volume and pressure. Describe the renin-angiotensin system and discuss the significance in cardiovascular regulation. Use Poiseuille's law to explain how blood flow is regulated. Define total peripheral resistance and explain how vascular resistance is regulated by extrinsic control mechanisms. Describe the functions of nitric oxide and endothelin-1 in the paracrine regulation of blood flow. Describe the intrinsic mechanisms involved in the auto-regulation of blood flow. Explain the mechanisms by which blood flow to the heart and skeletal muscles is regulated. Describe the changes that occur in the cardiac output and in the distribution of blood flow during exercise. Describe the cutaneous circulation and explain how circulation in the skin is regulated. List the factors that regulate the arterial blood pressure. Describe the baroreceptor reflex and explain its significance in blood pressure regulation. Explain how the sounds of Korotkoff are

produced and how these sounds are used to measure blood pressure. The functions of the respiratory system and the structures of the lungs are briefly described. Explain how the intrapulmonary and intrapleural pressures vary during ventilation and relate these changes to Boyle's law. Define the terms compliance and elasticity and explain how these lung properties affect ventilation. Discuss the significance of surface tension in lung mechanisms, explain how the law of LaPlace applies to lung function, and describe the role of pulmonary surfactant. Explain how inspiration and expiration and expiration are accomplished during normal & forced breathing. Describe the accessory respiratory muscles that are used in forced breathing. Define the various lung volumes and capacities that can be measured by spirometry and explain how obstructive diseases can be detected by the FEV test. Explain how the process of gas exchange occurs within the lung. External and Internal Respiration. Differentiate between Oxygen and carbon dioxide transport. Distinguish between the factors that contribute to gas transport, in terms of the oxygen dissociation curve, etc. Explain how acid base balance is achieved: acidosis vs alkalosis. Explain how the acid-base balance of the blood is affected by carbon dioxide and bicarbonate, and describe the roles of the lungs and kidneys in maintaining acid-base balance. Describe how breathing is regulated. Describe the nature of some pulmonary disorders, including asthma, bronchitis, emphysema, and fibrosis.

PHYSIOLOGY IIB (PHGY201)

Contact time (hours per week)

Theory: 4 periods
Practical: 2 periods
Tutorials: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	40%
Final Mark	50%

Topics Covered

The urinary system covers a : Description of the structure and function of kidneys. Description of the structure & role of the nephron. Description of the structural and functional relationships between the nephron tubules and their association blood vessels. Description of the composition of glomerular ultrafiltrate and explain and

explain how it is produced. Description of PCT: Salt & water Reabsorption. Discussion of reabsorption at different levels of nephron tubules. Explanation of the action of antidiuretic hormone (ADH) in the maintenance of homeostasis. Explanation of renal plasma threshold. Definition of the term renal plasma clearance and explain why the clearance of inulin is equal to the glomerular filtration rate. Description of the mechanisms of glucose reabsorption and define the terms transport maximum and renal plasma threshold. Description of the mechanism of Na+ reabsorption in the distal tubule and explain why this reabsorption occurs together with the secretion of K+. Description of the effects of aldosterone on the distal convoluted tubule and explain how aldosterone secretion is regulated. Explanation of how activation of the renin-angiotensin system results in the stimulation of aldosterone secretion. Describe the hormonal changes that occur during puberty, the mechanisms that control puberty onset, and the secondary sex characteristics that develop during puberty. Explain how the secretions of pituitary gonadototropic hormones (FSH and LH) are regulated in the male and describe the actions of FSH and LH on the testis. Describe the structure of the testis and the interaction between the interstitial Leydig cells and seminiferous tubules. Describe the sequential events of spermatogenesis Explain the hormonal control of spermatogenesis and describe the effects of androgens on the male accessory sex organs. Describe the composition of semen. Explain the physiology of erection and ejaculation, and discuss the various factors that affect male fertility. Describe oogenesis and the stages of follicle development through ovulation and the formation of a corpus luteum. Explain the hormonal interactions involved in the control of ovulation. Explain the function and fate of the corpus luteum. Explain how the secretion of FSH and LH is controlled through negative and positive feedback mechanisms during menstruation. Describe the cycle changes that occur in the endometrium and the hormonal mechanisms that cause these changes. Discuss contraception.

PSYCHOPATHOLOGY (PPTH301)

Contact time (hours per week)

Theory: 3 periods
Practical: none
Tutorials: none

Assessment

Average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Communication and listening skills are developed. Emotional distress is recognised in the self and peers. Emotional distress is dealt with through an appropriate therapeutic technique, both in terms of the self and of the peer. Communication in the therapeutic situation is unambiguous through effective verbal and written media. The ability to follow and give clear instructions to patients must be demonstrated. The concepts of conflict, negotiation, mediation and collaboration must be identified and applied in the clinical practice context to facilitate the best resolution of the given context. The student's own professional development is critically assessed. Strategies for stress and burnout are effectively implemented by the student in terms of themselves and a peer. The nature and function of natural and human sciences are described and debated with reference to a clinical setting. The various psychological and human development theories are described and compared. These theories are applied in a simple assessment of the patient. Psychosocial development in the first 2 years, infant, childhood, adolescence and adulthood are described and applied in case studies. Body language is observed to support the interpretation of the patient's vocal indicators in face-to-face interactions. The appropriate information is extracted from the patient's verbal communication and an assessment is made of the patient's needs. Barriers to effective communication in the clinical environment are identified in order to facilitate communication with patient. Multi-cultural sensitivity and appreciation is demonstrated, in the physical examination of fellow students.

PUBLIC AND COMMUNITY HEALTH (PCOH101)

Contact time (hours per week)

Theory:	2 periods
Practical:	none
Tutorial:	as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%

Final Mark 50%

Topics Covered

Key concepts in epidemiology : Define epidemiology. Discuss the difference between ratios, proportions and rates. Define incidence, prevalence and understand the difference between these measures. The principles and methods of demography, epidemiology and biostatistics and their relevance to health are discussed: Define basic demographic concepts and their application to health service. Discuss the causation and prevention of disease. Describe design strategies in epidemiological research. Describe the important ethical debates in epidemiology. Presenting and summarizing data : Describe the statistical method and its application. Differentiate different types of variables. Use frequency tables and graphs to present data. Calculate summary measures for numerical data. Planning and conducting epidemiological studies : Discuss the relevance of epidemiological studies to the health sector. Describe the different methods of sampling. Describe the different types of study design and their application. Differentiate between validity, precision and accuracy. Define and describe the different types of error in epidemiological studies. Analysing epidemiological studies :Outline the use of the normal curve in statistics. Describe standard error and confidence intervals. Describe the hypothesis testing. Identify and discuss common statistical tests and their application. Define the concepts of p values. Interpret the results of statistical tests. The above are discussed with particular relevance to South African and in particular KwaZulu Natal and within the context of prevailing disease profiles and patterns.

RESEARCH METHODS AND BIOETHICS (RMBE411)

Contact time (hours per week)

Theory: 3 periods
Practical: none
Tutorial: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark 50%
Final Mark 50%

Topics Covered

Understanding knowledge. Research terminology. Qualitative and Quantitative Research paradigms and their relevant research study designs. Writing a literature review utilising appropriate scientific writing and methods of literature appraisal. Research methodology including research designs, sampling, data collection, basic biostatics. Referencing Techniques. Writing a proposal. Principles of research ethics.

SOCIOLOGY (SLST211)

Contact time (hours per week)

Theory: 2 periods
Practical: none
Tutorials: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%
Final Mark	50%

Topics Covered

SOCIOLOGY : The socialisation process, Social structure, Belief systems, Social problems. PSYCHOLOGY : The nature, scope and methods of psychology, Principle approaches in psychology, Developmental psychology, The senses, perception and mental processes, Learning, Social influences, The nature, scope and methods of sociology.

SYSTEMIC PATHOLOGY IA (SYSP311)

Contact time (hours per week)

Theory: 4 periods
Practical: none
Tutorials: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark 40%
Final Mark 50%

Topics Covered

Introduction, Diseases of the: Skin, Blood vessels, Heart, Haematopoietic and Lymphoid system, Lungs and Upper Respiratory tract, Kidneys and collecting system.

SYSTEMIC PATHOLOGY IB (SYSP321)

Contact time (hours per week)

Theory: 4 periods
Practical: none
Tutorials: as required

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark 40%
Final Mark 50%

Topics Covered

Introduction, Diseases of the: Gastrointesinal tract, Liver, Biliary tract, Pancreas, Musculoskeletal system, Nervous system, Endocrine system, Female genital system and breast, Male genital system.

VALUES IN THE WORKPLACE (VWKP101)

Contact time (hours per week)

Theory: pending 2022
Practical: pending 2022
Tutorial: pending 2022

Assessment

Continuous assessment

Pass requirements: subminima

Year Mark	50%
Final Mark	50%

Topics Covered

The module will begin with a reflection on personal values and move to a discussion on how they intersect with values in the workplace. Small group discussions will be formed around how to build positive values in the workplace and the vital themes of ethics, respect, interconnectedness, honesty, creativity and human diversity will form the basis for building "sacred spaces at work." This will set the tone to unpack issues around leadership values and ethics and ethical decision making. The final section of the module will integrate all these aspects and students will be required to identify the implications of what they have learnt to develop social responsibility and their roles as citizens.

9.3 MASTERS OF HEALTH SCIENCES: CHIROPRACTIC (MHSCR1)

CHIROPRACTIC CASE MANAGEMENT (CCMA511)

Contact time (hours per week)

Theory: 2 periods
Practical: none
Tutorial: as required

Assessment

Continuous assessment with the average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	50%
Final Mark	50%

Topics Covered

Knowledge from modules covered in the Bachelors of Health Science : Chiropractic and in line with the knowledge content areas as described by the minimum criteria for curricula as laid out in the Act will be applied to case and problem based learning. Key elements to an effective and comprehensive case history and examination. Relevant patho-physiology, anatomy, histology and clinical disease features are discussed and described with reference to conditions seen by chiropractors. When to refer and for

what? Problem solving strategies to clinical cases. Diagnostic formulation. Communicating case findings oral and written. Reflective journaling. Ethical clinical practice

CHIROPRACTIC PRACTICE VA

Contact time (hours per week)

Theory: pending 2022
Practical: pending 2022

Assessment

This is a continuous assessment module. To complete the module the student will

- Submit a portfolio detailing minimum of 15 patients a month.
- Completion of all other modules.

Pass requirements: subminima

Pass/fail based on competence

Topics Covered

Practical clinical as outlined in the Clinic Manual for the year of registration.

CHIROPRACTIC PRACTICE VB

Contact time (hours per week)

Theory: pending 2022
Practical: pending 2022

Assessment

This is a continuous assessment module. To complete the module the student will

- Submit a portfolio detailing minimum of 15 patients a month.
- Undergo a knowledge and skills assessment (e.g. OSCE / viva voce). The outcome will be deemed as competent or incompetent.
- Completion of all other modules.

Pass requirements: subminima

Pass/fail based on competence

Topics Covered

Practical clinical as outlined in the Clinic Manual for the year of registration.

CLINICAL CHIROPRACTIC PRACTICUM VA (CCPP511)

Contact time (hours per week)

Theory: none
Practical: 8.75 hours per week
Tutorial: as required

Assessment

This is continuous assessment with the average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	60%
Final Mark	60%

Topics Covered

Practical clinical as outlined in the Clinic Manual for the year of registration.

CLINICAL CHIROPRACTIC PRACTICUM VB (CPP512)

Contact time (hours per week)

Theory: none
Practical: 8.75 hours per week
Tutorial: as required

Assessment

This is continuous assessment with the average of tests calculated separately for theory and practical components of the modules

Pass requirements: subminima

Year Mark	60%
Final Mark	60%

Topics Covered

Practical clinical as outlined in the Clinic Manual for the year of registration.

DIAGNOSTIC IMAGING V (DIIM501)

Contact time (hours per week)
Theory: 2 periods
Practical: 4 periods
Tutorial: as required

Assessment
Continuous assessment

Pass requirements: subminima

Year Mark	60%
Final Mark	60%

Topics Covered
Preparing radiographs for patients with pathology.

Patient introductions, Patient preparations, Unit preparations
The following regions need to have been completed by the then of the masters training:

- Cervical spine
- Thoracic Spine
- Lumbar Spine
- Pelvis
- Hand and Wrist
- Elbow
- Shoulder girdle
- Foot and ankle
- Knee
- Hip
- Chest
- Abdomen
- Long bones (as possible)

Radiograph exposure, Radiograph development, Patient exit procedures, Reading of the radiograph, Writing of a report on the radiograph produced and Submitting report and radiographs to the referring doctor.

PRACTICE MANAGEMENT and JURISPRUDENCE I (CPMJ511)

Contact time (hours per week)

Theory: 2 theory
Practical: 2 practical (guest lecturers)
Tutorial: as required

Assessment Plan

Theory Tests and assignments	50%
Examination (1x3hr paper)	50%

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics covered
Practice management includes but is not limited to Office location and design, Equipment, supplies, purchasing and leasing, Accounting, record keeping and filing systems, Financing, Single and partnership practices and contracts, Taxation, Staff, Insurance, Medical schemes, Workmen's Compensation and M.V.A., Professional associations, Practitioner/patient relationship, Patients, the public, professional associates and referrals, Business Ethics, Labour relations act in respect of practice, Performance management, Coding and billing procedures (NHRPL and ICD10 – as appropriate at the time). Jurisprudence includes but is not limited to General medical and health legislation, Chiropractors Homoeopaths & Allied Health Service Professions, Council Act & Allied Health Professions Acts as amended, Rules and regulations, Board decisions and requirements

RESEARCH PROJECT AND DISSERTATION (RPCR511/ RPCR521/ RPCR531)

Contact time (hours per week)

To be determined

Assessment Plan

Dissertation	100%

Pass requirements: subminima

Final Mark	50%

General Comment

Students will research an approved topic and write a dissertation which will include information about the materials and methods used, the results obtained, discussion of the findings and drawing conclusions where possible. The project may be completed in one year with a maximum of two years.

Through the approved process of research approval at the Durban University of Technology:

- Proposal development and approval
- Dissertation development and examination
- Publishable article development in draft format

9.4 MASTER OF TECHNOLOGY: CHIROPRACTIC (MTCHR1)

CHIROPRACTIC PRINCIPLES AND PRACTICE V (CHPP501)

Contact time (hours per week)

Theory	1
Practical	3

Assessment

Theory and Practical Tests	40%
Examination	60%

The examination shall consist of one 3-hour theory paper and one 30-minute practical. A minimum of 100% of students will be moderated for the practical examination

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Extravertebral adjustment techniques. Temporomandibular joint. Shoulder girdle and upper extremity. Hip joint. Lower extremity. Soft tissue techniques. Osteopathic techniques – Articulatory technique, Muscle energy technique, Strain – counter strain

technique

CLINICAL BIOMECHANICS AND KINESIOLOGY V (CBKI501)

Contact time (hours per week)

Theory	4
Practical	2

Assessment

Theory Tests	28%
Practical Tests	12%
Examination	60%

The examination shall consist of one 3-hour theory paper and one 30min practical examination.
A minimum of 100% of students will be moderated for the practical examination.

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Biomechanics of the extremities and TMJ, Pathologies affecting the extremities and TMJ. Radiological changes in problems of the extremities and TMJ. Clinical presentation and patient management in extremity and TMJ problems.

CLINICAL CHIROPRACTIC V (CLCH501)

Contact time (hours per week)

Theory	5
Practical	2
Clinic	13

Assessment

Theory Tests	25%

Practical Tests	25%
Examination	50%

The examination shall consist of one 3-hour theory paper, one 30min practical examination and one OSCE. (the latter of which is combined with continuous assessment mark derived from competencies). A minimum of 100% of students will be moderated for the practical examination

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics Covered

Review of electrotherapy and traction equipment, Patient assessment, Management rationale, Clinical radiology, Report writing, narrative, medico-legal, Chiropractic patient care (clinical practicum), The pregnant / geriatric / paediatric patient. Physical examination of the extremities and TMJ, "Wellness" in chiropractic care.

PRACTICE MANAGEMENT and JURISPRUDENCE I (PMJU501)

Contact time (hours per week)

Theory	2
Practical	0

Assessment Plan

Theory Tests and assignments	40%
Examination (1x3hr paper)	60%

Pass requirements: subminima

Year Mark	50%
Examination Mark	50%
Final Mark	50%

Topics covered

A. Practice management: Office location and design, Equipment, supplies, purchasing and leasing, Accounting, record keeping and filing systems, Financing, Taxation, Single and partnership practices and contracts, Staff, Insurance, Medical

schemes, Performance management, Workmen's Compensation and M.V.A., Professional associations, Practitioner/patient relationship, Patients, The public, professional associates and referrals, Business Ethics, Labour relations act in respect of practice.

B. Jurisprudence: General medical and health legislation, Chiropractors Homoeopaths and Allied Health Service Professions, Council Act and Allied Health Professions Acts as amended. Rules and regulations, Board decisions and requirements.

RESEARCH PROJECT AND DISSERTATION (RPLX512 / RPLX522)

Contact time (hours per week) 13

Assessment Plan

Assessment 100%

Pass requirements: subminima

Final Mark 50%

General Comment

Students will research an approved topic and write a dissertation which will include information about the materials and methods used, the results obtained, discussion of the findings and drawing conclusions where possible. The project may be completed in one year with a maximum of two years.

9.5 DOCTOR OF TECHNOLOGY: CHIROPRACTIC (DTCHR1)

Dissertation (DRCHR1)

Contact time (hours per week)

Assessment Plan

Assessment 100%

Pass requirements: subminima

Final Mark 50%

General Comment

Students will research an approved topic and write a thesis

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