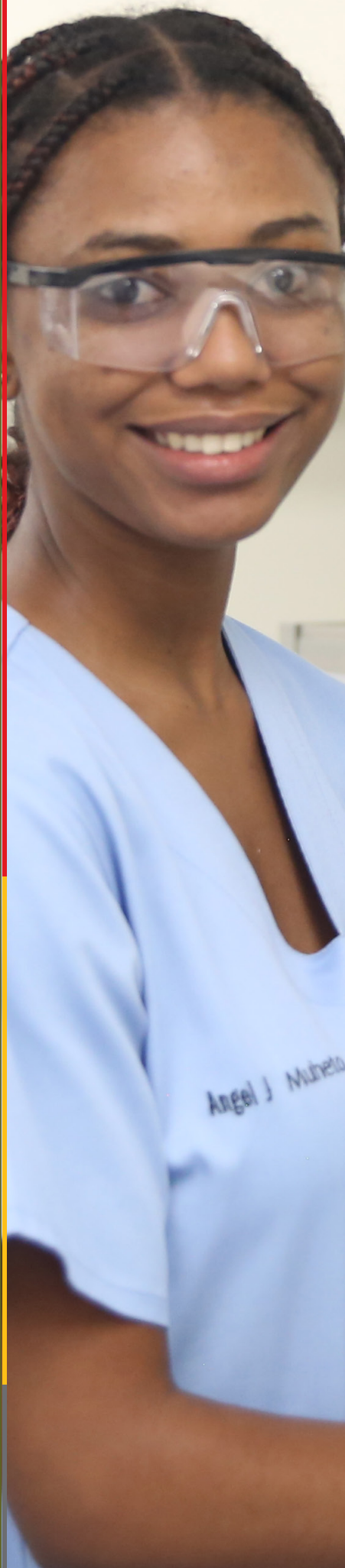




FACULTY OF HEALTH SCIENCES &
VETERINARY MEDICINE

School of Dentistry



Prospectus 2024
UNIVERSITY OF NAMIBIA

NOTE

This Prospectus is only valid for 2024 as regulations and syllabi may be amended for 2024. The general regulations and further information appear in the General Information and Regulation Prospectus. Although the information contained in this Prospectus has been compiled as accurately as possible, it is possible that errors and omissions have inadvertently occurred, for which we apologise in advance. The University reserves the right to amend any regulation or stipulation without notice. The information is correct up to 30 November 2024.

The fact that particulars of a specific module or programme have been included in this Prospectus does not necessarily mean that the module or programme will be offered in 2024. This Prospectus must be read in conjunction with the *General Information and Regulations Prospectus 2024*.

SCHOOL OF DENTISTRY PREAMBLE

The mission of the School of Dentistry is to be a Regional centre of excellence in preparing graduates for a life-long professional career in the provision of dental care that is in tune with the needs of society. The School shall provide a quality learning environment conducive to the pursuit of professional competence, while providing services to the community and undertaking relevant translational research for the enhancement of health. The School will continually strive for the establishment of training programs in the field of dentistry, lending support to the human resource development initiatives of the country; this will include the provision of Continuing Professional Development and postgraduate education of dentists, and the training and education of specialists and scientists. Finally, the School will seek high tech dental solutions for the treatment of children and patients with dental phobia and handicapped persons by using dental Laser devices systems for diagnostics and painless and bloodless surgery, which will be unique not only in Namibia but also in the surrounding countries.

The key objectives of the School of Dentistry are:

- To promote equity of access to health care services for all;
- To promote affordable health care service delivery by strengthening health care systems that are sustainable, cost-effective, efficient, culturally relevant and acceptable;
- To institute dental care measures to counter major health risks including the prevailing communicable diseases;
- To develop academically and professionally qualified dentists in sufficient numbers to support the health care infrastructure of Namibia;
- To conduct research directed to the health care needs of the Namibian society at large, and which is instrumental in ensuring quality health care service delivery;

SCHOOL OF DENTISTRY OATH

All (Students and Faculty):

We pledge to serve our patients, their families, our community and each other with respect, competence, compassion, and humility. We hold as our ideal to care and treat all of our patients. From them we will learn. We hold as our ideal the advancement of knowledge. Through it disease will be understood, prevented and cured. We hold as our ideal open-minded collaboration. To this we are collectively committed. We hold as our ideal critical self-evaluation. Through this we will grow.

Faculty:

We, your faculty, promise to serve as worthy role models, as our own teachers have before us.

Students:

We, your students, recognize the excellence and commitment of those from whom we learn.

Faculty:

We promise to support your personal and professional growth, in health care settings, in the clinics, in the community, and through your own teaching.

Students:

We promise to pursue responsibly our calling to patient care, to service, and to research.

Faculty:

We promise to maintain an environment where scientific integrity and ethical standards sustain your trust in us.

Students:

We commit ourselves to the highest standards of academic honesty, scientific integrity and ethical practice as students and in our professional lives.

All (students and faculty members):

We honour The University of Namibia, the Health Professions Councils of Namibia and our Government's history of service to the people of this nation. We accept the challenges and opportunities of those alumni whom we follow. We vow to be professional, punctual and courteous. We vow to honour and respect life on earth, in all forms, crawling and reasoning, with intellect or with handicap, to be ambassadors of healthy living and a prosperous future. We vow to take to heart and mind that all men are created equal. We vow to uphold this pledge and our assistance to others who do the same.

UNAM 2024 CORE DATES

SEMESTER 1	
11 January 2024	University Open
23 January	Academic Staff Resumes Office Duties
25 March	Vacation School Commerce for Distance Student (Until 28 March)
28 March	First Semester BREAK Commences For Students (Until 2 April)
3 April	Lectures Commence After FIRST SEMESTER BREAK
12 July	End Of First Semester
15-19 July	Mid Year Break
SEMESTER 2	
26 August	Second semester BREAK for student commences (Until 31 August)
27 August	Institutional Holiday
28 August	Vacation School Commerce for distance student (Until 30 August)
02 September	Lectures commence after SECOND SEMESTER BREAK
06 December	End of Second Semester
13 December	End of Academic Year
2025 ACADEMIC YEAR	
9 January	University opens for 2025 academic year
21 January	Academic staff resumes office duty for 2025 academic year

CANCELLATION DATES

DATE	DESCRIPTION
05 February	Last day to cancel core semester modules with 100% credit – New curriculum students
16 February	Last day to cancel core semester modules with 50% credit – New curriculum students
23 February	Last day to cancel core semester modules – New curriculum students
23 February	Last day to cancel Semester 1 and year modules with 100% credit – Old curriculum students
15 March	Last day to cancel first semester and year modules with 100% credit – New curriculum students
15 March	Last day to cancel first semester modules with 50% credit – Old curriculum students
12 April	Last day to cancel first semester and year modules with 50% credit – New curriculum students
30 April	Last day to cancel FIRST SEMESTER MODULES – All students.
08 July	Last day to cancel year modules with 50% credit – All students
09 August	Last day to cancel second semester with 100% credit – All students
02 September	Last day to cancel second semester with 50% credit – All students
30 September	Last day to cancel second semester and year modules – All Students

Due Dates for the 2023 Academic Year

DATE	DESCRIPTION
17 January	Last day to apply for remark for the second semester and year modules of First and Second opportunity examinations of November 2023)
18 January	Last day to apply to write promotional examination
18 January	Last day to apply for the retention of continuous assessment (CA) marks
24 January	Last day to approve promotional examinations applications by Schools
09 February	Last day for application of module(s) exemptions – New Curriculum Students
09 February	Last day for approval of module(s) and qualification changes – New Curriculum Students
16 February	Last day for application of module(s) exemptions – Senior Students
16 February	Last day for approval of module(s) and qualification changes – Senior Students
23 February	Last day for approval of module(s) exemptions – New Curriculum Students
08 March	Last day for approval of module(s) exemptions – Senior Students
30 April	Last day to change offering types

Final 1st, 2nd, 3rd, 4th, 5th School of Dentistry Academic Calender

SEMETER 1	
JANUARY	
11Jan- Thursday	University Opens
15 Jan- Monday	SOD Academic staff resumes office duty
22 Jan- Monday	SOD lectures commence 3 rd , 4 th , and 5 th years until 17 th May
22 Jan- Monday	SOD lectures commence core semester 2 nd year until 1 st March.
22 Jan -Monday	Clinicals sessions commence 4 th and 5 th years
29 Jan -Monday	Lectures commence core semester new curriculum first years (Until 1 st March)
MARCH	
01 March -Friday	Lectures end core semester 1 st and 2 nd years.
04 March- Monday	Lectures commence 1 st and 2 nd years (Until 11 June)
28 March - Thursday	STUDENT BREAK COMMENCE
02 April- Tuesday	STUDENT BREAK ENDS
MAY	
17 May - Friday	SOD lectures End 3 rd , 4 th , and 5 th years.
17 May - Friday	Clinical sessions continue 3 rd , 4 th , and 5 th years. BChD
24 May- Friday	Clinic sessions Ends 3 rd years BChD
JUNE	
07- June- Friday	Clinicals sessions End 4 th years
07- June- Friday	First Opportunity examinations 3 rd End
11- June- Tuesday	Lectures End 1 st and 2 nd years.
10 June- Monday	District Hospital and community practice I, 3 th years and Elective attachments for 4 th years commences until 5 th July
12 July- Friday	Clinicals sessions End 5 th year.
12 July- Friday	END OF SEMESTER ONE
15- 19 July	MID YEAR BREAK
22 July- Monday	Lectures commence 3 rd , 4 th and 5 th years.
22 July -Monday	Clinicals sessions commence 3 rd , 4 th and 5 th years
SEMESTER TWO	
29 July -Monday	Lectures commence second semester 1 st , 2 nd years.
AUGUST	
26 Aug-Monday	STUDENT BREAK COMMENCE
30 Aug- Friday	STUDENT BREAK ENDS
SEPTEMBER	
02 Sept- Monday	Class resume after second break
OCTOBER	
18 th Oct -Friday	Lecture/Clinical sessions End 4 th years BChD
NOVEMBER	
01 Nov- Friday	Lecture Ends for 1 st , 2 nd , 3 rd , 4 th and 5 th year BChD (14 weeks)
01 Nov- Friday	Clinicals sessions Ends 3 rd and 5 th years.
11 Nov – Monday	District Hospital and community practice II, Commences 4 th years until 6 th Dec
DECEMBER	
06 Dec- Friday	District Hospital and community practice II, Ends 4 th years.
13 Dec- Friday	END OF ACADEMIC YEAR

SUPPORTING STRUCTURE AND PERSONNEL

Executive Dean	Prof J Hall
Associate Dean School of Dentistry	Dr J Rutabanzibwa
Faculty Manager	Mr A Flederbascher
Campus Administrator	Ms D Titus
Faculty Officer	Ms I Peter
Secretary/Administrator	Ms S Amia
Examination Officer	Vacant

Student Records Officer	Mr M Nowaseb
Student Support Officer	Mr A Ngwangwama
Security Officer	Mr H Nakadiva
ICT Officer	Mr A Shikongo
ICT Officer	Mr S Shilongo

General enquiries regarding the School of Dentistry and the qualifications offered by the school should be directed to:

Ms I. Peter
The Faculty Officer
School of Dentistry
University of Namibia
Private Bag 13301
WINDHOEK
Telephone: +264-61-2065015
E-mail: ipeter@unam.na

ACADEMIC DEPARTMENTS

ASSOCIATE DEAN

☎ (+264 61) 2065022 jrutabazibwa@unam.na ✉ Private bag 13301, Windhoek, Namibia

Associate Dean: Dr Juvenary Jonh Rutabanzibwa- Public Health Specialist, Masters in Public Health, University of the Western Cape(UWC), Doctor of Dental Surgery(DDS), University of Dar es salaam. Certificate in Project Management, University of cape Town (UCT), Certificate in Monitoring and Evaluation (M&E), University of Cape Town(UCT), Former Chief Dentist for Namibia.

DEPARTMENT OF RESTORATIVE DENTISTRY AND PROSTHODONTICS

☎ (+264 61) 2065125 cmarufu@unam.na ✉ Private bag 13301, Windhoek, Namibia

Head of Department: Dr. Chamunorwa Marufu,BDS, MDS Prosthodontics, University of Nairobi

Lecturer (Restorative): Dr. Bremer van Eyk, B.Ch. D. University Stellenbosch

Lecturer (Restorative): Dr P. M. Nyalunga, Degree in Dental Therapist (MEDUNSA), Mastership Laser Dentistry;MSc Lasers Dentistry, Scientific Integrity (AALZ/RWTHAACHENUNIVERSITY-GERMANY)

Lecturer (Periodontology): Dr. Ngouri Hjarunguru, B.Ch.D. University Western Cape

Dental assistant: Mr Eliud Mandume SHIWAYU – Registered Nurse, Registered Accoucheur, Registered Community Health Nurse, Registered Psychiatric Nurse, Dental Nurse & Developmental Specialist; Master in Development Studies, University of the Free States, Bloemfontein, Republic of South Africa, Bachelor of Nursing Science (Advanced Practice) Community Health Nursing Science & Health Service Management, University of Namibia (UNAM) and University Diploma in Nursing Science (General, Psychiatric & Community Health) and Midwifery Science, University of Namibia (UNAM) Republic of NAMIBIA.



DEPARTMENT OF COMMUNITY DENTISTRY AND ORTHODONTICS

☎ (+264 61) 2065166 rmuro@unam.na ✉ Private bag 13301, Windhoek, Namibia

Head of Department: Dr Rehema Tumaini Muro, Bachelor Degree in Doctor of Dental Surgery (DDS), University of Dar es Salaam. Master in Public Health (MPH), UNAM. Postgraduate Diploma in Interceptive Orthodontics, UWC. Certificate in Clinical Management of HIV/AIDS, University of Washington. Intern Curator, Intermediate Hospital Oshakati.

Lecturer Community Dentistry: Dr Francis Mburu- Bachelor of Dental Surgery, Nairobi University, Masters of Community Dentistry, University of the Western Cape



Lecturer Orthodontics/Pedodontics: Dr Arthur Chigova, BDS, University of Zimbabwe, PG Orthodontics, UWC

DEPARTMENT OF MAXILLOFACIAL AND ORAL SURGERY (+264 61) 2065112sbere@unam.na Private bag 13301, Windhoek, Namibia

Head of Department: Dr Silas Kudakwashe Bere Specialist Maxillofacial and Oral Surgeon. Masters in Maxillofacial and Oral Surgery (MChD), University of Nairobi Kenya. *Arbeitsgemeinschaft für Osteosynthesefragen Craniamaxillofacial Surgery* (AOCMF) Fellow. Bachelor of Dental Surgery(BChD) University of Zimbabwe. Registered Specialist Maxillofacial Surgeon at Health Professions Council of Namibia (HPCNA) and Medical and Dental Practitioners Council of Zimbabwe(MDPCZ). Member of International association of Oral and Maxillofacial Surgeons. Research interest : Maxillofacial trauma ,Cleft lip and palate and ameloblastoma

Lecturer: Dr R Hange Maxillo facial and Oral surgeon Chir-Maxfac-Dent (University of Witswatersrand)Fellow Colleges of Maxillofacial and Oral surgeons of SA (MFOS(SA))Special interest : Cleft lip and palate and head and neck oncology

Lecturer: Dr Mikhail Pietersen: Bachelor's degree in Dental Surgery - BChD (University of the Western Cape) Postgraduate Diploma in Oral Surgery – PDD Oral Surgery (University of the Western Cape)

CLINICAL SUPPORT STAFF (+264 61) 2065180andefenongo@unam.na Private bag 13301, Windhoek, Namibia

Receptionist: Ms Aune Ndefenongo

Dental Assistant: Ms Senia Wilbard

Dental Assistant: Ms Albertina Bonifatius

Dental Assistant: Ms Aine Haipinge

DEGREE: BACHELOR OF DENTAL SURGERY (BChD) 25BCHD

The purpose of this programme is to develop professional dentists who are knowledgeable, skilled and ethically positioned to: provide evidence-based oral health care (EBOHC);

- promote oral health as an integral part of total health, and, oral healthcare as an integral part of comprehensive healthcare
- apply appropriate knowledge, skills and abilities, and behaviors to practice safely and efficiently
- adopt a reflective practitioner approach committed to the active pursuit of life-long learning;
- plan and conduct research projects to increase and improve oral health related research in Namibia.

The graduates of the BChD Programme will increase access and equity to Oral health and dental surgery services to all Namibians particularly the rural populations where such services are limited and/or poorly resourced. Thus, moving towards fulfilling the 2030 Vision, SDGs and DNP5 of comprehensive health care provided by the Namibian people and universal health coverage.

GRADUATE EMPLOYABILITY ATTRIBUTES

1. Professionalism
2. Interpersonal, Communication and Social Skills
3. Knowledge Base, Information and Information literacy
4. Clinical Information Gathering
5. Diagnosis and Treatment Planning
6. Therapy: Establishing and Maintaining Oral Health
7. Prevention and Health Promotion

CAREER OPPORTUNITIES

BChD holders enjoy a wide spectrum of career opportunities nationally and internationally. As a dental practitioner:

1. The graduate may be employed in the public sector usually at the state run hospital
2. The graduate may be employed as a General Practitioner in the private sector.
3. Once registered with HPCNA, the dental practitioner has also the option of being self-employed in his/her own dental clinic.
4. May be employed at the university as academic staff

DURATION OF STUDY

The minimum duration for the Bachelor of Dental Surgery (BChD) is five (5) years. Candidates must complete the BChD programme within seven (7) years of full-time study.

ARTICULATION OPTIONS

Graduates from BChD are eligible for further clinical specialty, scientific, and management training at post-graduate Masters and Fellowship programs.

CRITERIA FOR ADMISSION

To be considered for admission to the School of Dentistry, a candidate must have obtained the following grades at Namibian Senior Secondary Certificate Ordinary Level / Namibian Senior Secondary Certificate Higher Level (not older than 2 years) / Namibian Senior Secondary Certificate Advanced Subsidiary Level or equivalents from a recognized qualification:

- a) A minimum of 35 points in five subjects on the UNAM Evaluation Scale.
In addition, the following subjects and grades will be required:
 - English with a minimum B symbol or better at NSSC Ordinary Level (or C symbol with a minimum of 37 points), or a minimum "c" or better at NSSCAS Level
 - Biology with a minimum "b" or better at NSSCAS Level
 - Physics with a "b" or better at NSSCAS Level
 - Chemistry with a "b" or better at NSSCAS Level
 - Mathematics with a "c" or better at NSSCAS Level

OR

- b) A minimum of 35 points in five subjects on the UNAM Evaluation Scale.
In addition, the following subjects and grades will be required:
 - English with a minimum B symbol or better at NSSC Ordinary Level (or C symbol with a minimum of 37 points) or a score of grades 3 or better at NSSC Higher Level
 - Biology (or Life Science) with a minimum B symbol at NSSC Ordinary Level, or a grade 2 or better at NSSC Higher Level
 - Mathematics with a minimum B symbol or better at NSSC Ordinary Level, or a grade 2 or better at NSSC Higher Level

- Physical Science or Chemistry with a minimum B symbol or better at NSSC Ordinary Level, or a grade 2 or better at NSSC Higher Level

OR

- c) A completed undergraduate degree programme in Pharmacy, Nursing, Medicine or other health-related degree programme at a minimum of Bachelor's or Bachelor of Technology degree level such as a Science degree in Biological or Medical Sciences, with an average of at least 60% overall. National Diplomas, Technical Diplomas, Certificates and similar qualifications CANNOT be considered for entry.
- Sciences Requirements for applicants who have obtained a completed undergraduate degree (ALL of the following are compulsory): 60% for first year university degree level Biology (Full course), 60% for first year university degree level Physics (Full Course); 60% for first year university degree level Chemistry (Full Course).
 - The above three subjects (Biology, Physics and Chemistry) MUST be completed at first-year of a university Bachelor's degree or higher. Applicants will only be considered if they have obtained the minimum UNAM points as outlined above;
- d) Transfer of students from other programmes in other Schools in the Faculty of Health Sciences and Veterinary Medicine, including Pharmacy, Medicine, Nursing and public health, Allied health and veterinary medicine, will be subjected to the approval by Associate Deans of the concerned schools, as well as approval by the School of Dentistry AAGC.
- Transfer of students from other Dental degree programmes from other institutions or universities, may be considered by the School AAGC based on availability of space and if they have obtained the minimum UNAM points as outlined above or as determined by the School AAGC.
- e) Mature Age: Candidates aspiring for admission to the BChD through the Mature Entry Scheme must satisfy the following conditions:
- they must be at least 25 years old on the first day of the academic year in which admission is sought
 - they must have successfully completed a Relevant degree program such as Pharmacy, Nursing, Medicine or other health related degree program with an average of at least 60%
 - they must have successfully completed senior secondary education with a minimum total of 25 points on the UNAM Scale, obtained in five (5) subjects, including Mathematics, Physical Science/Chemistry, Biology and a minimum C in English at NSSO level.
- f) Candidates may be admitted to the Bachelor of Dental Surgery degree based on Recognition of Prior Learning (RPL), based on procedures in the UNAM RPL Policy.

Only candidates who have applied for Bachelor of Dental Surgery as first choice will be considered for selection into the programme.

Meeting the above student admission criteria **DOES NOT** necessarily ensure admission. Admission is based on the number of places available and is awarded on the basis of merit and other criteria and any other conditions that may be determined from time to time. The Faculty/School reserves the right to administer special written entry tests and interviews for shortlisted candidates before final admission

ASSESSMENT CRITERIA

- A student will be eligible to write the final examination in each module if they have obtained a *Continuous Assessment Mark* of at least 50%. The regular UNAM requirement (40%) will apply to the UNAM core modules.
- Unless otherwise indicated in the module descriptor, the Continuous Assessment Mark (CA mark) will count 50% towards the final mark while the examination mark will contribute 50%.
- A student will pass a module when he/she has obtained a final mark of at least 50%. Subject to a subminimum of 45% examination marks for all modules without a clinical/practical paper, a subminimum of 50% will apply for the practical/clinical examination. A student can only do two supplementary clinical modules. If the student has failed more than two clinical modules will have to repeat.
- A student may qualify for a supplementary examination in a module if he/she obtained a final mark of 45%-49% subject to a subminimum of 45% in each of the papers (written, clinical/practical). A student who qualifies for a supplementary examination in a clinical module, should undergo a remedial clinical training period of minimum four weeks per module before the supplementary examination.

For detailed examination and promotion rules see the General Information and Regulations Prospectus.

MINIMUM REQUIREMENTS FOR RE-ADMISSION INTO THE PROGRAMME

A student will not be re-admitted into the programme if she/he has not earned:

- At least 67 credits by the end of the first year of registration
- At least 226 credits by the end of the second year of registration
- At least 408 credits by the end of the third year of registration
- At least 584 credits by the end of the fourth year of registration
- At least 756 credits by the end of the fifth year of registration

ACADEMIC ADVANCEMENT AND PROGRESSION RULES

First Year to Second Year of Dentistry	A student who has passed at least 112 credits of the first year, will proceed to second year of study. A student who has passed at least 67 but less than 112 credits will be allowed to register for a maximum of 56 second year credits, provided that all pre-requisites are met and the maximum number of credits is not exceeded.
Second Year to Third Year of Dentistry:	A student who has passed all first year modules and at least 108 credits of the second year, will be allowed to register third year modules, provided that all pre-requisites are met and the maximum number of credits is not exceeded. The student has to pass third year competence tests before being allowed to start third year clinical service provision.
Third Year to Fourth Year of Dentistry:	A student who has passed all first and second year modules and at least 110 credits of the third year, will be allowed to register for non-rotation modules, provided that all pre-requisites are met and the maximum number of credits is not exceeded. The student has to pass fourth year Competence tests before being allowed to start fourth year clinical service provision.
Fourth Year to Fifth Year of Dentistry:	A student must pass all the fourth year modules in order to advance to the final year.

STUDENTS REPEATING A YEAR: A student who is repeating a year may be allowed to take non-conflicting modules from the next academic year, subject to the above requirements and the Assessment Criteria.

In addition to the above regulations, the student will only be allowed to repeat a particular module twice- failure to clear any module after the third registration of a particular module will result in termination of study.

REQUIREMENTS FOR QUALIFICATION AWARD: A student can graduate with the BChD upon completion of the prescribed number of credits (889) in the curriculum. Following graduation, graduates will be required to successfully proceed into a possible internship in Namibia as per national requirements at the time of graduation.

ber of Modules/Credits to be Passed/Obtained at the Various Year Levels in order to be awarded the degree by the School		
Year Level	Number of Passed Modules Required	Credit Equivalent
First year level	12 Modules	164 credits
Second year level	15 Modules	193 credits
Third year level	10 Modules	180 credits
Fourth year level	10 Modules	199 credits
Fifth year level	8 Modules	177 credits
TOTAL		889 CREDITS

BACHELOR OF DENTAL SURGERY	
OLD CURRICULUM	TRANSFORMED CURRICULUM
Computer Literacy (CLC3509)	Digital Literacy (U3583DD)
Contemporary Social Issues	OUT
Embryology and Introduction to Anatomy (ATM3511)	Embryology and Introduction to Anatomy(M3511BA)
English for Academic Purposes (LEA3519)	Academic Literacy I (U3583DD)
Medical Physics (PLG3501)	Medical Physics(M3501BF)
Organic Chemistry (BCM3501)	Organic Chemistry(P3501BO)
Systemic Physiology I(PLG3511)	Physiology and integrated Pathophysiology I (M3511BP)
Introduction to Dentistry and Ethics (PHP3580)	Introduction to Dentistry and Ethics(D3500CE)
General Biochemistry I (BCM3512)	Medical Biochemistry I (M3512BB)
Sociology of Health & Disease (PCS3512)	Sociology of Health and Disease(M3511HS)
Statistics for Health Sciences (RID3512)	Statistics for Health Sciences(M3512BS)
Systemic Physiology II (PLG3512)	Physiology and integrated Pathophysiology II (M3512BA)
Dental Morphology and Occlusion (RDT3601)	Oral Biology (D3613SB)
COBES (PHP3600)	COBES (M3619FC)
Dental Materials Sciences (Dental Material Sciences (RDT3611))	Dental Materials Sciences (Dental Material Sciences(D3621))
Oral Health Promotion/ Preventive dentistry (PHP3611)	Oral Health Promotion/ Preventive dentistry(D3651OP)
Oral Radiology I (DSG3611)	Oral Radiology I (D3651SO)
Facial Growth and Occlusal Development (PHP3671)	Facial Growth and Occlusal Development(D3771)
General Pathology (DSG3682)	Anatomical Pathology(P3612TA)
Medical Microbiology (MCB3612)	Medical Microbiology I (M3631TM)
Dental Pharmacology (DSG3612)	Pharmacology I (P3632CO)
Epidemiology (RID3711)	Epidemiology (M3711TE)
Periodontology I (RDT3731)	Periodontology (D3753RP)
Research Methods and Proposal Writing (CRS3740)	Research Methods and Proposal Writing((M3713TR)
Oral Microbiology (DSG3711)	Oral Microbiology(D3741RM)
Oral Medicine and Oral Pathology (DSG3731)	Oral Medicine and Oral Pathology (D3652SP)
Restorative Dentistry I(RDT3711)	Restorative Dentistry and endodontics I(D3753RE)
Oral Radiology II(DSG3702)	Oral Radiology II(D3652SO)
Restorative Dentistry II and Endodontics (RDT3772)	Restorative Dentistry and endodontics II(D3883RE)
Periodontology II (RDT3702)	Periodontology II (D3853RP)
Orthodontics (PHP3702)	Orthodontic I (D3752OO)
Dental Prosthetics I(RDT3722)	Dental Prosthetic I (D3753RD)
Dental Prosthetics II (RDT3742)	Dental Prosthetic II (D3893RD)
Research Project (RDT3810)	Research Project(D3813TR)
Oral & Maxillo-facial Surgery I(DSG3811)	Oral maxillo-facial Surgery I(D3883SX)
Dental Prosthetics III (RDT3881)	Dental Prosthetic II (D3893RD)
Leadership and Management (PHP3801)	Public Health Dentistry Management and Leadership(3861OL)
Gerodontics and Special Needs (RDT3801)	Gerodontics and Special Needs ((D3841PG)
Dental Prosthetics IV(RDT3802)	Dental Prosthetic II (D3893RD)
Pediatric Dentistry (PHP3882)	Pediatric Dentistry (D3822OP)
Dental Practice Management (PHP3802)	Dental Practice management(D3802PP)
Oral & Maxillo-facial Surgery II(DSG3831)	Oral & Maxillo-facial Surgery II(D3893SX)
Restorative Dentistry III(RDT3821)	Restorative Dentistry and Endodontics III(D3853RP)
Periodontology III(RDN3801)	Periodontology II (D3853RP)
Public Health Dentistry	Public Health Dentistry Management and Leadership(D3861OL)
Dental Prosthetics V	Dental Prosthetic III (D3883RD)

First Year Level

At first year level, students take the University Core Curriculum modules and the required nine (9) dental surgery *modules* indicated below. The normal first year curriculum of a student registered in the Bachelor of Dental Surgery degree programme will therefore consist of twelve (12) *Modules* (140 credits), compiled as follows:

Subject	Modules	Credits
University Core Curriculum	3*	24
Dental Surgery at first year level	9	116
Total	12	140

Curriculum

Students take all modules below:				
Semester	Code	Course Title	Prerequisite(Co-requisites) /	Compulsory (C)/Elective (E)
SC	D3500CE	Introduction to Dentistry and Ethics	-	C
SC	U3583DD	Digital Literacy	-	C
SC	U3583AL	Academic Literacy I A	-	C
S1	M3511BA	Embryology and Introduction to Anatomy	-	C
S1	M3501BF	Medical Physics	-	C
S1	P3511SO	Organic Chemistry	-	C
S1	M3511BP	Integrated Physiology and Pathophysiology I		C
S1	M3511HS	Sociology of Health & Disease		C
S2	M3512BB	Medical Biochemistry I	(P3511SO)	C
S2	M3512BS	Statistics for Health Sciences		C
S2	M3512BA	Systemic Anatomy I	(M3511BA)	C
S2	M3512BP	Integrated Physiology and pathophysiology II	(M3511BP)	C

Second Year Level

At second year level, students proceed with the University Core Curriculum modules and general dental surgery modules. The normal second year level curriculum of a student registered in the Bachelor of Dental Surgery degree programme will therefore consist of fifteen (15) *Modules* (193 credits), compiled as follows:

Subject	Modules	Credits
University Core Curriculum	4*	24
Dental Surgery at second year level	11	169
Total	15	193

Students take all modules below:				
Semester	Code	Course Title	Prerequisite(Co-requisites) /	Compulsory (C)/Elective (E)
SC	U3683AL	Academic Literacy I B	-	C
SC	H3513NM	Medical Anthropology	-	C
SC	U3520TH	Introduction to Critical Thinking	-	C
SC	U3520LP	Leadership Skills		C
S0	D3613SB	Oral Biology	M3511BA	C
S1	D3621RM	Dental Materials Sciences	-	C
S1/S2	M3619FC	COBES	-	C
S1	D3651SO	Oral Radiology 1	M3501BF	C
S1	M3711TE	Epidemiology	M3512BS	C
S2	M3631TM	Medical Microbiology I		C
S2	D3651OP	Oral Health Promotion/ Preventive dentistry		C
S2	P3632CO	Pharmacology I	M3512BP	C
S2	M3612TA	Anatomical Pathology	M3511BA	C
S2	D3652SO	Oral Radiology II		C
S2	D3652SP	Oral Medicine and Oral Pathology		C

Third Year Level

At third year level, students proceed with the general dental surgery modules. The normal third year level curriculum of a student registered in the Bachelor of Dental Surgery degree programme will therefore consist of ten (10) *Modules* (180 credits), compiled as follows:

Subject	Modules	Credits
Dental Surgery at third year level	10	180
Total	10	180

Students take all modules below:				
Semester	Code	Course Title	Prerequisite(Co-requisites) /	Compulsory (C)/Elective (E)
S0	D3753RP	Periodontology I	M3631TM	C
S0	M3713TR	Research Methods and Proposal Writing	M3512BS + U3583DD	C
S0	D3741RM	Oral Microbiology	M3631TM	C
S0	D3753RE	Restorative Dentistry and Endodontics I		C
S1	D3741SX	Introduction to oral maxillofacial surgery	D3613SB	C
S1	D3761CO	Clinical Pharmacology in Dentistry	P3632CO	C
S0	D3753RD	Dental Prosthetics I	D3621RM	C
S1	D3771CF	Facial growth and occlusal development	M3512BA	C
S2	D3752OO	Orthodontics I		C
S2	D3731SG	General surgery and Medicine	M3512BP + M3512BA	C

Fourth Year Level

At fourth year level, students proceed with the general dental surgery modules. The normal fourth year level curriculum of a student registered in the Bachelor of Dental Surgery degree programme will therefore consist of ten (10) *Modules* (199 credits), compiled as follows:

Subject	Modules	Credits
Dental Surgery at fourth year level	10	199
Total	10	199

Students take all modules below:				
Semester	Code	Course Title	Prerequisite(Co-requisites) /	Compulsory (C)/Elective (E)
SC	D3782CP	Community Practice I		C
SC	D3782CH	District Hospital Dentistry I		C
S0	D3813TR	Research Project	M3713TR	C
S0	D3883SX	Oral & Maxillo-facial Surgery I	D3652SP	C
S0	D3893RD	Dental Prosthetics II	D3753RD	C
S0	D3893OO	Orthodontics II	D3752OO	C
S0	D3883RE	Restorative Dentistry and endodontics II	D3753RE	C
S1	D3841PG	Gerodontics and special needs		C
S2	D3822OP	Pediatric Dentistry		C
S2	D3802PP	Dental Practice Management		C

Fifth Year Level

At fourth year level, students proceed with the general dental surgery modules. The normal fourth year level curriculum of a student registered in the Bachelor of Dental Surgery degree programme will therefore consist of eight (8) *Modules* (177 credits), compiled as follows:

Subject	Modules	Credits
Dental Surgery at fourth year level	8	177
Total	8	177

Students take all modules below:				
Semester	Code	Course Title	Prerequisite(Co-requisites) /	Compulsory (C)/Elective (E)
SC	D3881CP	Community Practice II		C
SC	D3891CH	District Hospital Dentistry II		C
SC	D3782CA	Elective Attachment		C
S0	D3893SX	Oral & Maxillo-facial Surgery II	D3863SX	C

S0	D3883RD	Dental Prosthetics III	D3873RD	C
S0	D3893RE	Restorative Dentistry and endodontics III	D3883RE	C
S0	D3853RP	Periodontology II	D3753RP	C
S1	D3861OL	Public Health Dentistry management and leadership		C

COURSE DESCRIPTORS

FIRST YEAR LEVEL

D3500CE Introduction to Dentistry and Ethics

Proposed NQF Level: 5 **Credits:**4 **Contact Hours:** 2 hours / week for semester one & two

Content: The module will cover definitions of dentistry overall, history of dentistry, different specialty areas in it and descriptions of studies the students will go through to become oral health care professionals. Working environments and principles of provision of oral health care services both in public and private sector will be introduced. Various aspects of biomedical ethics including historical perspective, principlism, and professionalism will be introduced. The aims of National Guidelines on Oral Health Service Delivery and actions needed to implement it. Professional conduct and ethics of health care.

Assessment: Continuous assessment: 100% - Assignments in class (e.g. group/individual work, presentation): 40%, Test 1: 30% and Test 2: 30%

U3583DD Digital Literacy

Proposed NQF Level: 5 **Credits:**8 **Contact Hours:** Semester 0: 4 hours /2 week for semester 1 & 2 hours

Content: *Digital Proficiency:* ICT-based devices (laptops, tablets, smartphones, desktop computers, digital instruments and equipment); a mouse, keyboard, touch screen, voice control and other forms of input; screens, audio headsets and other forms of output; digital capture devices;

Digital Productivity: Basic productivity software (text editing, presentation, spreadsheets, image editing); email and other digital communication services; Internet or cloud or institutional shared spaces for Organising, managing and backing up digital files; software/apps and services suitable for learning-related tasks; digital tools fit learning and managing learning time

Information Literacy: search engines, indexes or tag clouds; wikis, blog posts, scholarly journals, e-books and the open web; file spaces and folders, bookmarks, reference management software and tagging; copyright, and digital citizenship issues

Data and Media Literacy: Digital data using spreadsheets and other media; data security and privacy; digital media messages – text, graphics, video, animation, audio and multimedia

Digital Creation and Innovation: digital materials (video, audio, stories, presentations, infographics); new digital tools for learning in digital settings

Digital Communication, Collaboration and Participation: digital communication; differences between media, norms of communicating in different spaces; false or damaging digital communications; collaborative tools and online environments; online networks.

Digital Learning and Development: digital learning opportunities; digital learning resources; digital tools/materials for organising, planning and reflecting on learning (mind-mapping, note-taking, e-portfolio/ learning journal/ blog)

Digital Identity and Wellbeing: online profiles for different networks (personal, professional, academic); digital reputation; managing personal data and privacy; digital CV or portfolio of work; digital technologies for personal development; online etiquette; wellbeing and safety online; internet addiction; cyberbullying and other damaging online behaviour

Assessment: Continuous assessment: 100%

U3583AL Academic Literacy I

Proposed NQF Level: 5 **Credits:**8 **Contact Hours:** Semester 0: 4 hours /2 week for semester 1 & 2 hours

Content: The module will cover study skills, reading, listening, speaking and writing, referencing, language usage and text organization.

Assessment: Continuous assessment: 100%

M3511BA Embryology and Introduction to Anatomy

Proposed NQF Level: 5 **Credits:**14 **Contact Hours:** 3+4P hours

Content: The module provides building blocks to master the following topics i) man's place in the organismic kingdom. ii) basic embryological concepts. iii) an integrated approach to histological structure and function of the primary tissues in relation to the primary organ systems. iv) terminology and definitions in anatomy. The module includes an introduction to microscopy and methods in microscopy. The module furthermore introduces the bioethics linked to the history of Anatomy and the Anatomy and Human Tissue Acts.

Assessment: Continuous assessment 60% Examination 40%

M3501BF Medical Physics

Proposed NQF Level: 5 **Credits:**14 **Contact Hours:** 3+4P hours

Content: Units (standards, SI system, converting units, order of magnitude); Motion (displacement, velocity, acceleration, falling objects); Vectors (representation, adding, subtracting scalar product, vector product); Force (Newton's 1st, 2nd and 3rd laws, mass, weight); Equilibrium (statics, equilibrium, elasticity); Fluids (density, specific gravity, pressure, Pascal's principle, measurement, flow, Bernouli's principle, viscosity, surface tension, pumps); Waves (wave motion, types of waves, energy, amplitude and frequency, reflection and interference, resource, refraction and diffraction); Gas laws & temperature (atomic theory, temperature and thermometers, thermal expansion, thermal stress, diffusion); Electricity (charge, field, potential, currents, basic circuits); Magnetism (magnetic fields, electric currents, force, electric charge, Ampere and out Coulomb, Ampere's Law, torque); Electromagnetism (electromagnetic induction, transformers, transmission of power, production of electromagnetic waves, light and electromagnetic spectrum); Light (wave versus particles, diffraction, refraction, visible spectrum and dispersion); molecules and solids (bonding in molecules, weak bonds); Radioactivity (structure and properties of nucleus, binding energy and nuclear forces, radioactivity, alpha, beta, and gamma decay, half-life and rate of decay, radioactive dating).

Assessment: Continuous assessment 60% Examination 40%

P3511SO Organic Chemistry

Proposed NQF Level: 5 **Credits:**14 **Contact Hours:** 4+2P hours

Content: The materials covered in this module are: Periodic table and electronegativity scale, acid base properties of solutions, thermodynamics, Functional groups and nomenclature of organic compounds, basic reactions of organic compounds, introductory spectroscopy, major organic compounds, principles of laboratory safety and laboratory procedures.

Assessment: Continuous assessment 60% Examination 40

M3511BP Integrated Physiology and Pathophysiology I

Proposed NQF Level: 5 **Credits:**14 **Contact Hours:** 3+4P hours

Content: The module provides building blocks to master the following topics i) man's place in the organismic kingdom. ii) basic embryological concepts. iii) an integrated approach to histological structure and function of the primary tissues in relation to the primary organ systems. iv) terminology and definitions in anatomy. The module includes an introduction to microscopy and methods in microscopy. The module furthermore introduces the bioethics linked to the history of Anatomy and the Anatomy and Human Tissue Acts.

Assessment: Continuous assessment 60% Examination 40%

M3511BA Embryology and Introduction to Anatomy

Proposed NQF Level: 5 **Credits:**14 **Contact Hours:** 3+4P hours

Content: The study of physiology encompasses several fields of study, from molecules to ecosystems. Here we begin with an investigation of basic cell processes. The students will be expected to understand how molecular interactions are integral to the generation, storage, and utilisation of energy, signalling and cellular dynamics. Building upon this, we will stress the importance of cellular and tissue compartmentation, and how information flows within a cellular and mass context. The integration of these systems and how they may impact homeostasis is also of critical importance. To conceptualise the normal functioning of the cells, tissues, and organs, the pathophysiology will be incorporated alongside each system discussed.

By the end of the course students will also be familiar with the components and mechanics of the: basic cell processes, energy and cellular metabolism, membrane dynamics and communication, integration, and homeostasis; genetics; body fluid compartments. This module will introduce the two main communication systems in the body: the endocrine system and the nervous system. The cellular and network properties of neurons and how they function within the context of the central and peripheral nervous systems; the Muscular Skeletal system and the control of body movement; as well as the structure and function of the endocrine system.

Assessment: Continuous assessment 50% Examination 50%

M3511HS Sociology of Health and Disease

Proposed NQF Level: 5 **Credits:**14 **Contact Hours:** 3+4P hours

Content: Sociological understanding of health, illness and disease considers the structural and social factors and not largely relies on biological medical explanations of health and disease. The structural emphasis will entail consideration of the political, economic and social cultural elements that foster ill/ health, as well as the forces that allows/ constrain the health care system and individuals' responses to illness. The module also focuses on the indirect pathway between sociology and health/disease, and emphasises the role that beliefs and behaviours play in health and illness.

Furthermore, the module will address the sociological definition of disease, explore major theoretical perspectives in health, behavioural science, and sociology, the influence of class, gender and ethnicity on health; global and rural health problems; health

promotion and community health services among others. This will enable the students to understand the social determinants of health, social construction of illness, social meanings of illness, patterns in the distribution of health and illnesses, people health seeking behaviours; interaction between patients and the health provider. The course will also explore medicine as power and social control and the role of alternative medicines.

Students will also examine health-related behaviours and apply many of the theories to specific behaviours, e.g. addictive behaviours and the factors that predict smoking and alcohol consumption as well as Gender Based Violence and HIV. Throughout the course students will focus on the interrelationships between beliefs, behaviour and health using the example of placebo effects; illustration of this interrelationship in the context of illness, focusing on HIV, cancer, obesity and coronary heart disease; aspects of women's health; the problems with measuring health status and the issues surrounding the measurement of quality of life.

Assessment: Continuous assessment 40% Examination 60%

M3512BB Medical Biochemistry I

Proposed NQF Level: 5 **Credits:**14 **Contact Hours:** 3+4P hours

Content: The module will cover the following topics: Cell biology; Introduction to Medical Biochemistry and its relationship to cell biology; Cellular diversity, function and compartmentalisation; The cell cycle. Protein structure and function; Structure and properties of amino acids, peptides and proteins; Peptides and Protein function (glutathione, globular proteins and fibrous proteins); Protein purification and separation methods/techniques. Enzymes; Enzyme properties and mechanism of action; Enzyme kinetics, inhibition and regulation; Diagnostic and therapeutic uses of enzymes. Lipid chemistry and lipoproteins; Definition, Structure and biomedical importance of various lipids and complex lipids; Steroids and Prostaglandins; Structure and function of lipoproteins. Chemistry of vitamins and minerals; Chemistry of vitamins, minerals and dietary sources; Role of vitamins in metabolism, growth and development (implication of vitamin deficiency); Role of minerals in metabolism, growth and development (implication of minerals deficiency). Carbohydrate chemistry; Structure and function of carbohydrates; Carbohydrates in living systems; Glycoconjugates. Signalling Pathways; Signalling molecules and modes of cell signalling; G-protein coupled receptors and G-protein signalling; Second messengers, signal transduction and disease. Nucleic acid chemistry and genetic information transfer; Nucleic acid structure and properties; DNA organisation, synthesis and repair; RNA synthesis – Transcription. Protein synthesis; Protein synthesis – Translation; Post-translational processes; Regulation of gene expression. Introductory medical genetics; Mechanisms of genetic variation; Mendelian inheritance; Introductory cytogenetics, genetics and disease. Recombinant DNA technology; Principles of DNA isolation and cloning; Principles of DNA amplification and sequencing; Principles of hybridization and microarrays. Introduction to bioinformatics; Principles of bioinformatics and biologic databases; Assessing pairwise sequence similarity; Introduction to phylogenetics.

Assessment: Continuous assessment 40% Examination 60%

M3512BS Statistics for Health Sciences

Proposed NQF Level: 5 **Credits:**14 **Contact Hours:** 3+4P hours

Content: *Describing Univariate Data:* Central Tendency, Spread, shape and graphs. *Describing Bivariate Data:* Scatterplots and Correlation. *Introduction to Probability (elementary):* Simple probability, Conditional probability, Probability of A and B, Probability of A or B. *Normal Distribution:* Standard normal distribution, Converting to percentiles and back, and area under portions of the curve. *Sampling Distributions:* Sampling distribution of the mean, Standard error, Central limit theorem, Difference between means, Proportion, Difference between proportions. *Confidence Intervals:* Overview, Mean, σ known, Mean, σ estimated, General formula. Difference between means of independent groups, σ known, Difference between means of independent groups, σ estimated, Pearson's correlation, Difference between correlations. *The Logic of Hypothesis Testing:* Ruling out chance as an explanation, The null hypothesis, Steps in hypothesis testing and conclusion, The precise meaning of the p value, Statistical and practical significance, Type I and II errors, One- and two-tailed tests, Confidence intervals and hypothesis testing following a non-significant finding. *Testing Hypotheses with Standard Errors:* General formula Tests of μ , σ known, Tests of μ σ estimated, $\mu_1 - \mu_2$, independent groups, σ estimated, $\mu_1 - \mu_2$, dependent means, σ estimated. *Chi square:* Test for independence and goodness-of-fit and equality of proportion. *Power:* Factors affecting power, Size of difference between means, Significance level, Sample size, Variance.

Assessment: Continuous assessment 40% Examination 60%

M3512BA Systemic Anatomy I

Proposed NQF Level: 5 **Credits:**14 **Contact Hours:** 3+4P hours

Content: Regional anatomy and topographical anatomy, development and histology of musculoskeletal and neurological systems including sensory organs. Dissection and microscopy practical sessions of each system. Examples of the applications of anatomical knowledge in clinical cases. Clinical examination of the systems in the skills laboratory.

Assessment: Continuous assessment 60% Examination 40%

M3512BP Integrated Physiology and Pathophysiology II

Proposed NQF Level: 5 **Credits:**14 **Contact Hours:** 3+4P hours

Content: The study of physiology encompasses a number of fields of study, from molecules to ecosystems. Here we continue with an investigation of the divisions of the nervous system along with their pathophysiological conditions. Students will be expected to understand and apply the knowledge around the general principles of neurophysiology into the different divisions of neurophysiology. Building upon this we will stress the importance of cellular and tissue compartmentation, and how information flows within a cellular and mass context. We will investigate the physiological basis of problems associated with most of the major organ systems. In each case we will discuss the effect upon whole body homeostasis.

Topics include:

1. Describing cell injury and its importance in pathophysiological manifestations of disease,
2. Outlining the basic pathophysiological mechanisms leading to the diseased state,
3. Explaining how changes in physiology lead to signs and symptoms of disease
4. Synthesising important systemic complications during organ or organ system failure and
5. Describing the body's compensatory mechanisms to restore homeostasis. The integration of these systems and how they may impact homeostasis is also of critical importance.

Laboratory activities include demonstrations of blood typing among others.

Assessment: Continuous assessment 50% Examination 50%

SECOND YEAR LEVEL

U3683LA Academic Literacy II

Proposed NQF Level: 5 **Credits:**8 **Contact Hours:** Semester 0: 4 hours/week; Semester 2: 2 hours/week

Content: The module is designed for students enrolled in a bachelor's degree, which requires them to do basic research, read and listen to specific academic material, produce specific written texts and give academic presentations. The module thus, focuses on enhancing academic reading, academic vocabulary, writing, listening and speaking

Assessment: Continuous assessment: 100%

H3513NM Medical Anthropology

Proposed NQF Level: 5 **Credits:** 12 **Contact Hours:** 4hrs/week

Content: This module represents a first exposure to Medical Anthropology, local understanding of medical systems and beliefs in understanding the different cultures; acquiring the most basic knowledge and skills of various cultural interpretations of health and illness which will enable them to become more tolerant and better understanding different health systems and beliefs.

Assessment: Continuous assessment 100%

U3520TH Introduction to Critical Thinking

Proposed NQF Level: 5 **Credits:**2 **Contact Hours:** 1-hour practical session per week

Content: The module will cover: Definition of critical thinking: striving for understanding; to have an inquisitive yet open-minded and flexible approach to exploring ideas, the ability to evaluate information and draw clear conclusions based on the evidence at hand. Core critical thinking skills: explain, infer, analyse, evaluate, problem solving, self-reflect. Deductive and inductive reasoning: inductive reasoning- move from the specific to the general, deductive reasoning-moving from the general to specific. Construction of argument: construct statements that combine reasoning with evidence to support an assertion or argument. Problem analysis: define problem, determine the root causes of problem, develop alternative solutions to problem, implement solution, evaluate outcome. Reflective learning: asking open questions, reflecting on answers, writing reflective learning essays, thinking about other answers, asking 'why' questions. Understanding fallacies: what is a fallacy? Description of various fallacies, identifying a fallacy in an argument, explaining a fallacy to an opponent in an argument.

Assessment: Continuous assessment 100%

D3613SB Oral Biology

Proposed NQF Level: 6 **Credits:**26 **Contact Hours:** 2+2P hours

Content: The materials covered in this module are: Embryology and development of the ora-facial system, intra and extra-oral anatomy, morphology of teeth. How all facial structures together with the teeth form the masticatory system and the dentition. Movements of the lower jaw and how the temporomandibular joint functions in jaw movements. Occlusal relationships of teeth in jaw movements. Masticatory muscle forces. Introduction to physiology of occlusion.

Assessment: Continuous assessment 50%; Examination 50%

D3621RM Dental Materials Sciences

Proposed NQF Level: 6 **Credits:**7 **Contact Hours:** 2 hours per week for 16 weeks

Content: This module covers topics on dental materials; their chemical content and physical characteristics. How the chemical structure of the materials changes during their management and the stability of this chemical structure in different conditions. Physical properties of the materials, how each material should be managed, how different types of waste should be safely disposed. Criteria for selection of appropriate materials to be used in oral health care and when constructing dental appliances.

Assessment: Continuous assessment 60%; Examination 40%

M3619FC Community Based Education and Service I (COBES I)

Proposed NQF Level: 6 **Credits:**8 **Contact Hours:** 5 hours of integrated learning and Household attachment

Content: Teaching of basic nursing skills will facilitate the immersion of the student into the clinic setting in Windhoek. Following principles of patient safety, original teaching and performance of skills will occur in the skills lab setting under supervision. Eventually with exposure to the clinics and primary care level, the student will participate in aspects of basic service delivery to patients. The learning will be re-enforced by assessment through observation of skills and assignments related to the patient's illness in the context of the family and community.

Assessment: Continuous assessment 100%

D3651SO Oral Radiology I

Proposed NQF Level: 6 **Credits:**14 **Contact Hours:** 6 hours per week for 16 weeks

Content: Topics to be covered include: Structures of matter; atomic energy levels; electromagnetic radiation, production of radiographic rays; the radiographic tube: the anode, the cathode, transformers, voltage rectification, basic radiographic circuit; physics of production of radiographs: characteristics, energy spectrum and operating characteristics of radiographic devices; interaction of radiation with matter: ionization, photo electric effect, Compton scattering, pair production; production of radiographic images: image formation and contrast; factors affecting the quality of radiographic images, radiographic contrast, scattered radiation, and contrast, radiographic receptors; measurement of absorbed dose: absorbed dose, dose measurements; Radiation protection: patient exposure and protection, personnel exposure and protection; the Radiographic film; intra-oral radiographic techniques; infection control in dental radiography; normal radiographic anatomy, diagnosing normal and pathological processes from radiographic images.

Assessment: Continuous assessment 50%; Examination 50%

M3711TE Epidemiology

Proposed NQF Level: 7 **Credits:**16 **Contact Hours:** 3+1P hours

Content: This module covers topics on dental materials; their chemical content and physical characteristics. How the chemical structure of the materials changes during their management and the stability of this chemical structure in different conditions. Physical properties of the materials, how each material should be managed, how different types of waste should be safely disposed. Criteria for selection of appropriate materials to be used in oral health care and when constructing dental appliances.

Assessment: Continuous assessment 50%; Examination 50%

M3631TM Medical Microbiology I

Proposed NQF Level: 6 **Credits:**16 **Contact Hours:** 3 + 4P

Content: This module will cover: Bacterial cell nomenclature; morphology; body plan and components; structure and gram nature; Bacterial Processes cell growth; nutrition and metabolism; biofilms; Bacterial virulence regulation of virulence; pathogenicity and pathophysiological changes resulting from bacterial infections Bacterial Genetics: variation and inheritance; mutations and repair; Genetic exchange and Recombination. Normal Microbial flora Origins; Factors; Flora at different sites; Beneficial effects of flora Immunology: Basic concepts in immunology; components of the immune system; principles of innate and adaptive immunity; antigen recognition by B and T cells; development; maturation and survival of lymphocytes; adaptive Immunity to infection; failures of Host defence Mechanisms; (tolerance; allergy and hypersensitivity; autoimmunity; immunodeficiency; immunosuppression); tissue transplant; immune-surveillance; tumour immunity; transplant immunology; immunotherapy and immunisation. Spread and Control of Infection Sterilisation and Disinfection; Mechanisms of action of major classes of antimicrobial agents; drug resistance; multidrug resistant organisms and the physical and chemical prevention and control methods.

Assessment: Continuous assessment 40%; Examination 60%

D3651OP Oral Health Promotion/ Preventive dentistry

Proposed NQF Level: 6 **Credits:**14 **Contact Hours:** 3+4P hours per week for 16 weeks

Content: The module covers the background to, and history of health promotion and health promoting schools; the theory and application of health promotion models; the importance of assessing information for health promotion; the roles of the media and other stakeholders in health promotion; the planning cycle identifying the needs, writing objectives, indicators and development of action plan, project implementation and methods of evaluation; concepts of health and disease; introduction to health education, disease prevention and health promotion; Oral health education, hygiene aids and tooth brushing; dietary habits; outreach visits to schools and other community organizations, community clinics, health education/promotion units.

Assessment: Continuous assessment 100%

P3632CO Pharmacology I

Proposed NQF Level: 6 **Credits:** 14 **Contact Hours:** 4 hours

Content: Mechanisms and equations of drug receptor interactions; nature and types of drug dose response curves; pharmacodynamic terms describing drug dose effectiveness and safety; agonist and antagonist drug dose response curves and spare receptor theory; drug receptor families, cellular signal transduction pathways and second messengers; drug formulations and routes of drug administration; drug transport process, drug absorption, distribution and elimination; drug extraction ratio and clearance; effects of organ perfusion, protein binding and enzymatic activity on rates of drug elimination; pharmacokinetic compartment models; Pharmacokinetic parameters – their definitions and implications in drug therapy; drug plasma concentration time curves; pharmacokinetic models and equations and the use of semi-logarithmic graphs for determining pharmacokinetic parameters; drug metabolism and drug metabolising enzymes; enzyme induction and inhibition; Fundamental principles of drug interactions

Assessment: Continuous assessment 40%; Examination 60%

M3612TA Anatomical Pathology

Proposed NQF Level: 6 **Credits:**16 **Contact Hours:** 3 + 4P

Content: Pathology (also commonly referred to as laboratory medicine) comprises those services which provide knowledge and diagnostic information for the care of individual patients through the scientific analysis of specimens of blood, fluids, tissues and other samples. Pathology services constitute an essential element of clinical services through the contribution they make to the effective prevention, detection, diagnosis, treatment and management of disease, especially chronic disease. This curriculum in pathology is organised in three modules: histopathology, chemical pathology and haematology.

Assessment: Continuous assessment 40%; Examination 60%

D3652SO Oral Radiology II

Proposed NQF Level: 6 **Credits:**14 **Contact Hours:** 6 hours per week for 16 weeks

Content: Topics to be covered include: Structures of matter; atomic energy levels; electromagnetic radiation, production of radiographic rays; the radiographic tube: the anode, the cathode, transformers, voltage rectification, basic radiographic circuit; physics of production of radiographs: characteristics, energy spectrum and operating characteristics of radiographic devices; interaction of radiation with matter: ionization, photo electric effect, Compton scattering, pair production; production of radiographic images: image formation and contrast; factors affecting the quality of radiographic images, radiographic contrast, scattered radiation, and contrast, radiographic receptors; measurement of absorbed dose: absorbed dose, dose measurements; Radiation protection: patient exposure and protection, personnel exposure and protection; the Radiographic film; intra-oral radiographic techniques; infection control in dental radiography; normal radiographic anatomy, diagnosing normal and pathological processes from radiographic images.

Assessment: Continuous assessment 50%; Examination 50%

D3652SP Oral Medicine and Oral Pathology

Proposed NQF Level: 6 **Credits:**14 **Contact Hours:** 4+2P hours per week for 16 weeks

Content: The module will cover: patho-physiological basis of oral medicine as it is related to general medicine and/or surgery. Etiology, histology, radiology, diagnosis, prevention and treatment of pathological processes in hard and soft tissues of maxilla-facial area. Prevention and early detection of oral cancers. Manifestations of HIV and AIDS in maxilla-facial area. Obtaining medical information in connection with recording oral health status. Oral manifestations of the whole variety of medical and surgical diseases and conditions. Identification of patients whose oral manifestations may be due to general medical or surgery conditions. Complications that may be associated with use of oral health care medication or oral health care therapy as result of complex medical condition. Principles and practise of patient referral from dental office to medical professionals. Oral health care services that are commonly required for patients entering general medical and/or surgical treatment.

Assessment: Continuous assessment 60%; Examination 40%

THIRD YEAR LEVEL

D3713TR Research Methods and Proposal Writing

Proposed NQF Level: 7 **Credits:** 16 **Contact Hours:** 1+2P hours per week for 28 weeks

Content: *This module covers the following topics:* Introduction to quantitative and qualitative research, literature review, identification, selection, analysis and formulation of the research problem; Identification and formulation of the research question and hypotheses. Formulate problem statement, justification of the study, and the study objectives.

Classification of the study types: Descriptive studies - exploratory studies, cross-sectional studies, case report, case series, correlational studies. Analytical studies - cohort studies, case control studies, comparative cross-sectional studies. Intervention studies: clinical trials, experimental studies, quasi-experimental studies, fields interventional studies. The advantages and disadvantages of different study designs.

Sampling Methods: Non-probability sampling, Probabilistic or random sampling; sample size determination. Study population, specification of study variables, and types of variables.

Data collection methods: Data collection techniques, development of data collection tools and/or questionnaires. Report writing, citation of references and referencing styles - The Harvard system, Vancouver style, and APA. Ethical Considerations in health research, research project administration and research proposal development.

Assessment: Continuous assessment 50%; Examination 50%

D37513RE Restorative Dentistry and Endodontics I

Proposed NQF Level: 7 **Credits:**32 **Contact Hours:** 6 hours of integrated theory and practice

Content: Clinical structure of enamel, dentin and pulpo-dental structure. Histopathology of dental caries. Dental caries as a disease. The structure of saliva and its role in cariology. The content of different types of diet and their influence on caries processes. The microbiology of saliva and dental caries. Basics of caries diagnostics and clinical use of restorative materials.

Assessment: Continuous assessment 60%; Examination 40%

D3741SX Introduction to oral maxillofacial surgery

Proposed NQF Level: 7 **Credits:**8 **Contact Hours:** 6 hours of integrated theory and practice

Content: This module contains elementary training for practical emergency and acute care. Students will train the skills with phantom heads and other simulation materials. Comparison the speed and effect of different pain control methods, indications and limitations of their use. Extractions of different types of erupted teeth. Practical training of suturing and removing sutures.

Assessment: Continuous assessment 60%; Examination 40%

D3753RP Periodontology I

Proposed NQF Level: 7 **Credits:**32 **Contact Hours:** 6 hours per week of integrated theory and practical

Content: This module covers the following topics; Anatomy, histology, physiology and etiology and pathology of periodontium. Methods to maintain oral hygiene. Clinical and histological characteristics of periodontal diseases and their classification. Development, diagnostics and management of uncomplicated and advanced periodontal treatments. Instruments and devices used in periodontal diagnosis and treatment.

Assessment: Continuous assessment 60%; Examination 40%

D375200 Orthodontics I

Proposed NQF Level: 7 **Credits:**18 **Contact Hours:** 9 hours per week of integrated theory and practical (4+5P)

Content: This module will introduce the students to clinical management of orthodontic patients, including examination, collection of records and patient history, motivation of patients and caregivers, and management of treatment procedures under supervision. Assessment of patient records, making diagnoses, formulation of treatment plans and selection of appliances. Screening children for malocclusions, selecting between treatment modalities and performing preventive and interceptive procedures. Introduction to construction and activation of various orthodontic appliances, materials used in the appliances, mechanical properties of the appliances, and biomechanics of orthodontic tooth movement. Special attention is given to early orthodontic treatment and orthodontic growth modification. The module will also introduce the students to the role of orthodontists in a multidisciplinary team.

Assessment: Continuous assessment 60%; Examination 40%

D375200 Orthodontics I

Proposed NQF Level: 7 **Credits:**18 **Contact Hours:** 9 hours per week of integrated theory and practical (4+5P)

Content: This module will introduce the students to clinical management of orthodontic patients, including examination, collection of records and patient history, motivation of patients and caregivers, and management of treatment procedures under supervision. Assessment of patient records, making diagnoses, formulation of treatment plans and selection of appliances. Screening children for malocclusions, selecting between treatment modalities and performing preventive and interceptive

procedures. Introduction to construction and activation of various orthodontic appliances, materials used in the appliances, mechanical properties of the appliances, and biomechanics of orthodontic tooth movement. Special attention is given to early orthodontic treatment and orthodontic growth modification. The module will also introduce the students to the role of orthodontists in a multidisciplinary team.

Assessment: Continuous assessment 60%; Examination 40%

D3753RD Dental Prosthetics I

Proposed NQF Level: 7 **Credits:**32 **Contact Hours:** 6 hours per week of integrated theory and practical

Content: The module covers chemical, physical and technical characteristics of impression materials, plasters, acrylic, alloys and other materials that are used for removable denture treatment planning and preparation. Handling and construction of models; construction of individual impression trays, producing plaster models and fitting the models into articulator for studying and repairing removable dentures. Indications for various types of removable partial dentures; identification and treatment of health problems encountered with the use of removable dentures; oral hygiene, dietary and denture maintenance instructions; repairing relining and rebasing removable dentures

Assessment: Continuous assessment 60%; Examination 40%

D3731SG General Surgery and medicine

Proposed NQF Level: 7 **Credits:**16 **Contact Hours:** 6 hours per week of integrated theory and practical (2+4P)

Content: General principles of history-taking and General principles of physical examination The basic clinical signs and symptoms of disorders of the cardiovascular system, respiratory system, endocrine, nervous, alimentary canal, musculoskeletal and connective tissue and renal systems, disorders of haemostasis and haematopoiesis, Overview of medical emergencies and their management. Principles of surgical treatment, Inflammation and wound healing. Surgical Diagnosis: History taking and assessment of patients with surgical conditions. Trauma, Tumours and cysts, Haemorrhage and Shock, Blood transfusion, fluid and electrolyte balance, Ulcerations, gangrene, sinuses and fistulae, Surgical emergencies and Cardiopulmonary resuscitation. Side room investigations Haemoglobin, Haematocrit, Blood glucose (for dm), Urine tests ("dipstix") Diagnostic investigations Full blood count, Inr, ptt and bleeding time test, Serum electrolytes, Renal function, Liver function, Crp and sedimentation rate, Hiv, hepatitis, syphilis tests, Chest radiography, Mcs of urine/blood

Assessment: Continuous assessment 60%; Examination 40%

FOURTH YEAR LEVEL

D3782CP Community Practice I

Proposed NQF Level: 7 **Credits:**4 **Contact Hours:** 120 hours of community dentistry practical attachment

Content: Areas to be covered include: History taking, clinical examination, investigation, diagnosis, treatment planning, restorative and periodontal services, simple tooth extraction, referral, decision-making in relation to non-operative cases, and oral health education and screening.

Assessment: Continuous assessment 100%

D3782CH District Hospital Dentistry I

Proposed NQF Level: 7 **Credits:**4 **Contact Hours:** 120 hours of community dentistry practical attachment

Content: History taking, physical examination, various investigations and their indications, differential diagnoses and final diagnosis, treatment planning, administration of local anesthetics and treatment of adult patients requiring simple treatment procedures, occlusal malfunctions, teamwork, communication, and provision of preventive services, including health education.

Assessment: Continuous assessment 100%

D3813TR Research Project

Proposed NQF Level: 8 **Credits:**16 **Contact Hours:** 4 hours per week

Content: The student will continue refining the research proposal begun in the third year, and proceed to collect data from primary or secondary sources. Depending on the type of research methodology, data can be collected at the health facilities, City Council, other institutions, the community, etc. The student will apply the skills of research methodology to clean, collate and analyze data. This will be followed by preparation of research project report and the presentation of the report at a students' seminar. The student's reports and presentation will be scored and contribution made as to how the report could be improved. In addition, the student may move a step further to prepare a scientific paper for publishing on a peer reviewed journal.

Assessment: Continuous assessment 100%

D3883SX Oral & Maxillo-facial Surgery I

Proposed NQF Level: 8 **Credits:**40 **Contact Hours:** 9 hours per week of integrated theory and practical

Content: Development of skills in relevant history-taking and interpretation of the anamnestic findings; preparation of different surgical patients for operation; use and interpretation of radiographs; biopsy taking; operative extractions and apectomies; indications and contraindications for different types of pain management; more advanced knowledge and preparedness for CPR; introduction to mucosal disease and oral manifestations of systemic disease.

Assessment: Continuous assessment 60%; Examination 40%

D3883SX Dental Prosthetics II

Proposed NQF Level: 8 **Credits:**16 **Contact Hours:** 8 hours per week of integrated theory and practical

Content: The module will contain determination of need and possibilities for preparation of restorations manufactured both inside or outside oral cavity. Single fillings, crowns and bridges prepared for restorations, manufactured outside oral cavity, cooperation with technicians in charge of technical work; and fitting fixed solutions. The module will also cover theoretical basis for treating patients with complicated prosthetic solutions, like bridges with several attachment units and attachment retained prosthesis. Different types of bridge constructions; their indications and contraindications; attachment retained prosthesis; their indications and contraindications; requirements for remaining teeth and periodontium for combined prosthetic or complicated longer fixed prosthesis, treatment to retain the condition of remaining dentition; preparation and fitting of complex prosthetic constructions; managing patients receiving complicated prosthesis structures and instructing their self-care and maintenance of the appliance to retain good oral health

Assessment: Continuous assessment 60%; Examination 40%

D389300 Orthodontics II

Proposed NQF Level: 8 **Credits:**16 **Contact Hours:** 8 hours per week of integrated theory and practical(3+5P)

Content: This module will introduce the students to clinical management of orthodontic patients, including examination, collection of records and patient history, motivation of patients and caregivers, and management of treatment procedures under supervision. Assessment of patient records, making diagnoses, formulation of treatment plans and selection of appliances. Screening children for malocclusions, selecting between treatment modalities and performing preventive and interceptive procedures. Introduction to construction and activation of various orthodontic appliances, materials used in the appliances, mechanical properties of the appliances, and biomechanics of orthodontic tooth movement. Special attention is given to early orthodontic treatment and orthodontic growth modification. The module will also introduce the students to the role of orthodontists in a multidisciplinary team.

Assessment: Continuous assessment 60%; Examination 40%

D3883SX Dental Prosthetics II

Proposed NQF Level: 8 **Credits:**16 **Contact Hours:** 8 hours per week of integrated theory and practical

Content: The module will contain determination of need and possibilities for preparation of restorations manufactured both inside or outside oral cavity. Single fillings, crowns and bridges prepared for restorations, manufactured outside oral cavity, cooperation with technicians in charge of technical work; and fitting fixed solutions. The module will also cover theoretical basis for treating patients with complicated prosthetic solutions, like bridges with several attachment units and attachment retained prosthesis. Different types of bridge constructions; their indications and contraindications; attachment retained prosthesis; their indications and contraindications; requirements for remaining teeth and periodontium for combined prosthetic or complicated longer fixed prosthesis, treatment to retain the condition of remaining dentition; preparation and fitting of complex prosthetic constructions; managing patients receiving complicated prosthesis structures and instructing their self-care and maintenance of the appliance to retain good oral health

Assessment: Continuous assessment 60%; Examination 40%

D38220P Pediatric Dentistry

Proposed NQF Level: 8 **Credits:**12 **Contact Hours:** 5 hours per week of integrated theory and practical (2+3P)

Content: This module will cover etiology, prevention and clinical management of oral diseases in infants, children and adolescents; caries prevention and treatment of decayed primary teeth including strip crown restorations, stainless steel crowns and intra coronal restorations; clinical management of pediatric patients including children with high dental anxiety and fear, or special health care needs; use local anesthesia, performing extractions of primary teeth and management of dental traumas in children and adolescents; identification and management of problems of tooth eruption, construction and insertion of appliances for space maintenance.

Assessment: Continuous assessment 60%; Examination 40%

D3822OP Dental Practice Management

Proposed NQF Level: 8 **Credits:**9 **Contact Hours:** 3 hours per week of integrated theory and practical

Content: Management and administrative skills to enable a dentist to run a successful practice; how to take into consideration all professional groups, their roles and human resources management; administration and finances; assets management; material logistics, time management in clinical practice; reporting and record keeping; evidence based practice, continuous professional development.

Assessment: Continuous assessment 100%

FIFTH YEAR LEVEL

D3881CP Community Practice II

Proposed NQF Level: 8 **Credits:** 12 **Contact Hours:** 120 hours of community dentistry practical attachment

Content: History taking, clinical examination, investigation, diagnosis, treatment planning, provision of appropriate treatment, studying and evaluating oral health needs in the community, and oral health promotion.

Assessment: Continuous assessment 100%

D3891CH District Hospital Dentistry II

Proposed NQF Level: 8 **Credits:**4 **Contact Hours:** 120 hours of community dentistry practical attachment

Content: History taking, physical examination, various investigations and their indications, differential diagnoses and final diagnosis, treatment planning, and comprehensive treatment of patients with various conditions with very little supervision from the dentist. The student will also exercise teamwork and communication with patients and colleagues, and provide preventive services with minimal supervision.

Assessment: Continuous assessment 100%

D3891CH Elective Attachment

Proposed NQF Level: 8 **Credits:**4 **Contact Hours:** 200 hours of clinical attachment

Content: Elective studies on the selected discipline(s) will be carried out during the fourth and fifth years of studies. This will allow students to gain deeper knowledge, understanding and skills in dental specialty which the student finds particularly interesting.

Assessment: Continuous assessment 100%

D3893SX Oral and maxillofacial surgery II

Proposed NQF Level: 8 **Credits:** 40 **Contact Hours:** 9 hours of integrated theory and practical

Content: Practise of oral surgery; evaluation and management of surgical oral/dental patients; management of the acute demanding cases; preparedness for life-supporting procedures; further knowledge of pain management; sedation techniques; Dento-alveolar, pre-prosthetic and orthodontic surgery, Dental and maxillo-facial trauma diagnostics and treatment.

Assessment: Continuous assessment 60%; Examination 40%

D3883RD Dental Prosthetics III

Proposed NQF Level: 8 **Credits:**40 **Contact Hours:** 12 hours of integrated theory and practical

Content: The module covers the requirements of oral health and oral cavity structures for implant treatment; principles of examining patients for implant treatment; process of implant therapy; preoperative assessment of intra- and extra-oral conditions; principles of surgical procedures for implant placement; maintenance of rehabilitative constructions with implants.

Assessment: Continuous assessment 60%; Examination 40%

D3893RE Restorative Dentistry and endodontics III

Proposed NQF Level: 8 **Credits:**40 **Contact Hours:** 12 hours of integrated theory and practical

Content: Etiology, prevention and treatment of dental erosions, abrasions and dry mouth syndrome. Chemical, physiological and pathological characteristics of different prophylactic oral health care products, and self-care products obtained over-the-counter by consumers/patients. Risk evaluation of caries, erosion and abrasion for individual patients and for various populations.

Assessment: Continuous assessment 60%; Examination 40%

D3853RP Periodontology II

Proposed NQF Level: 8 **Credits:**36 **Contact Hours:** 6 hours of integrated theory and practical

Content: This module will cover diagnostics and treatment of advanced periodontal cases, and the role of genetics, systemic diseases and conditions in periodontal pathogenesis.

Assessment: Continuous assessment 60%; Examination 40%

D3861OL Public Health Dentistry, Management and Leadership

Proposed NQF Level: 8 **Credits:**9 **Contact Hours:** 2+1P

Content: For each outcome, the students will gain understanding of the general principles, with examples and/or assignments focusing on the Namibian context.

Assessment: Continuous assessment 100%

Prospectus 2024