

2018 BCHD

(AIM 111) Academic Information Management 111 – 2 lectures per week E

(Semester module – 4 credits)

Find, evaluate, process, present and manage information resources for academic purposes using appropriate technology.

(Pass with distinction)

(CMY 151) Chemistry 151 – 4 lectures and 1 x 3-hour practical or model building session per week E

(Semester module – 16 credits)

(Prerequisites – See Sec. B, Par 1.2)

Theory: Introduction to General Chemistry: Measurement in Chemistry; matter and energy; atomic theory and the periodic table; chemical compounds and chemical bonds, quantitative relationships in chemical reactions; states of matter and the kinetic theory; solutions and colloids; acids, bases and ionic compounds; chemical equilibrium. Introduction to Organic Chemistry: chemical bonding in organic compounds; nature, physical properties and nomenclature of simple organic molecules; isomerism; chemical properties of alkanes and cycloalkanes, alkenes, alcohols, aldehydes and ketones, carboxylic acids and esters, amines and amides; carbohydrates; proteins; and lipids. *Practical.*

(PHY 131) Physics for Biology Students 131 – 4 lectures, 1 discussion class and 1 practical per week E

(Semester – 16 credits)

(Prerequisites – See Sec. B, Par 1.2)

Units, vectors, one-dimensional kinematics, dynamics, work, equilibrium, sound, fluids, heat, electric potential, capacitance, optics, radio-activity.

(MLB 111) Molecular and Cell Biology 111 – 4 lectures and 1 practical per week E

(Semester module - 16 credits)

(Prerequisites – See Sec. B, Par 1.2)

Introductory study of the ultra-structure, function and composition of representative cells and cell components. General principles of cell metabolism, molecular genetics, cell growth, cell division and cell differentiation.

(UPO 110) Academic Orientation 110

(Attendance)

Orientation at the commencement of the academic year.

(GNK 188) Anatomy 188 – 18 lectures and 2 practicals per week E

(Semester module – 56 credits)

Systemic anatomy and embryology:

An introduction to anatomical terminology, the musculoskeletal system, nervous system, surface anatomy, cardiovascular system, respiratory system, urogenital system, gastro-intestinal system, the endocrine system and human embryology.

Human osteology:

Introduction to osteology, bone function and classification, humerus, radius, ulna, femur, tibia, fibula, clavicle, scapula, ribs, sternum, vertebrae, pelvis, hand and foot bones, sesamoid bones, skull, mandible, joints.

Human histology:

General introduction to cells and tissue, terminology, the cell and cytoplasm, organelles and inclusions, surface and glandular epithelium, general connective tissue, specialised connective tissue, namely cartilage, bone, blood and haemopoietic tissue, muscle and nervous tissue.

(POH 170) Public Oral Health 170 – 1 lecture and 1 practical per week E

(Semester module – 5 credits)

- Principles of public oral health
- Determinants of health
- Definitions of health, disease and illness
- Public health approaches to prevention

(Pass with distinction)

(IDE 170) Integrated Dentistry 170 – 1 lecture, 1 other contact session and 2 practicals per week E

(Semester module – 28 credits)

Introduction to clinical dentistry:

- Infection control training
- Occupational health and safety training

- Code of conduct, professionalism and ethical behaviour
- Academic skills training (library, goal-orientation, time management, etc)
- Basic dental assisting
- Basic tooth anatomy and terminology
- Dental terminology
- Psychomotor skills training (model casting, carving of teeth out of plaster, wax work)
- Introduction to the disciplines and specialities
- Third language training
- Clinic visits throughout the year
- Visits to a dental practice

(Pass with distinction)

(ELH 112) Academic English for Health Sciences 112 – 2 lectures per week E

(Semester module – 6 credits)

Proficiency in Academic English used in the basic medical sciences; analysis, synthesis and presentation of the texts prescribed in the second semester.

(Exemption examination passed)

(FIL 155) Science and World Views 155 – 1 lecture per week E

(Semester module – 6 credits)

This is a broad introduction to the philosophy and history of science. Examples of themes and historical periods which are covered include: world views in ancient Greece; Socrates; Plato – the founder of Western thought; Aristotle – the foundation of a new tradition; Leonardo da Vinci; the foundation of modern science; the wonder years of the seventeenth century – the flourishing of the sciences and philosophy; the rising of mechanization; a drastic turn in man's vision – the rise of psychology; how the theory of relativity changed our view of the cosmos; quantum theory and its implications for the modern world view; the biological sciences and the secrets of life; the rise and role of psychology; the neuro-sciences; the place, role and benefit of philosophical thought in the sciences.

(Pass with distinction)

(MTL 180) Medical Terminology 180 – 2 lectures per week E

(Semester module – 12 credits)

The acquisition of a basic medical orientated vocabulary compiled from Latin and Greek stem forms combined with prefixes and suffixes derived from those languages. The manner in which the meanings of medical terms can be determined by analysing the terms into their recognisable meaningful constituent parts, is taught and exercised. The functional use of medical terms in context as practical outcome of terminological application is continually attended to.

(Pass with distinction)

(ELH 111) Academic English for Health Sciences 111 – 2 lectures per week E

(Semester module – 6 credits)

Proficiency in Academic English by interpreting and contextualising philosophical and sociological texts prescribed during the first semester; a bio-ethical orientation for studying Healthcare; study skill improvement.

(Exemption examination passed)

(MGW 112) People and their Environment 112 – 4 lectures per week E

(Semester – 6 credits)

This module comprises basic psychology and sociology applicable to Dentistry. Basic psychiatric concepts are also taught.

(Pass with distinction)

(SEP 110) Sepedi for Beginners 110 – 2 lectures and 1 practical per week E/Sepedi

(Semester module – 12 credits)

* *This module is for absolute beginners only and is compulsory for beginners who want to take Sepedi at yr-level 2.*

** *Flexi-learning: Mode of presentation will be determined by student numbers.*

Basic Sepedi for beginners: The acquisition of basic Sepedi communicative skills with emphasis on everyday expressions and suitable high frequency vocabulary.

Advanced Sepedi for beginners: More advanced Sepedi communication within specific social situations in which everyday expressions and suitable high frequency vocabulary are utilized.

(AIM 121) Academic Information Management 121 – 2 lectures per week E
(Semester module – 4 credits)

Apply effective search strategies in different technological environments. Demonstrate the ethical and fair use of information resources. Integrate 21st century communications into the management of academic information.
(Pass with distinction)

2019 BCHD

(AFR 111) Basic conversational Afrikaans 111 – 1 lecture per week E/Afrikaans
(Semester module – 12 credits)

Basic Afrikaans grammar and pronunciation and a specific technical (oral health) vocabulary is studied and practised to enable students to converse with patients in the professional environment. In this practical module, students are required to memorise phrases and to practise conversation skills under close observation.
(Exemption only on 100 level)

(ZUL 110) IsiZulu for Beginners 110 – 2 lectures and 1 practical per week E/isiZulu
(Semester module – 12 credits)

*For absolute beginners only

*Only students from the School of Healthcare Sciences may take this module during semester 2. All other students must take this module during semester 1. Students from the School of Healthcare Sciences, who already possess the language skills taught in this module, may write an exemption examination.

The acquisition of basic isiZulu communicative skills with emphasis on everyday expressions and suitable high frequency vocabulary, within specific situations.
(Pass with distinction)

(GOM 270) General Microbiology 270 E
(Year module – 23 credits)

The course "Microbiology" will prepare the dental student with the necessary knowledge and the discussion capability regarding basic microbiology, virology and immunology of both the healthy and diseased patient so that the student will understand the normal functioning of the relevant systems of the human body and will have compassion for the needs of patients with deflections from the normal. The student will be able to integrate the knowledge gained with the holistic approach to patients in order to be able to approach the treatment of patients preventatively and comprehensively. The course will provide the dental student with a thorough basic knowledge of principles of infection in general microbiology and virology.

(Pass with distinction)

(GNK 286) Basic Emergency Care 286 - 1 other contact session per week, 8 practicals per week E
(Semester module – 5 credits)

Theory and practical training in basic emergency care
(Pass with distinction)

(GPS 280) Generic Procedural Skills 280 – 3 practicals per week E
(Semester module – 2 credits)

Prerequisite: CMY 151, GNK 127, GNK 128, MLB 111, PHY 131, GNK 120, BOK 121, MGW 112, FIL 155, MTL 180

Practical Sessions

The class is divided in groups and students are expected to strictly keep to these groups. To ensure that all students get adequate opportunity to do the practical and not only observe, it is expected that they attend the sessions as scheduled. Skills are practiced under supervision which supplies sufficient opportunity for interaction with the lecturers. Attendance of practical sessions is compulsory.

Theory: Career Exposure Risks

The content of two documents that were issued at registration will be discussed during the practical sessions on aseptic techniques.

Objective Structured Practical Evaluation (OSPE)

The aim with this is to assess the students are able to do the following:

(a) To execute a procedure in such a way that:

- the aim of the procedure is reached
- the patient is not disadvantaged by, for example, contamination during aseptic technique
- precautionary measures are followed to prevent blood transferable diseases.

(b) To execute the technique of a physical examination, correct, complete and professionally.

Procedures

Measuring of central venous pressure; arterial puncture; gastric lavage; nasogastric intubation; skin suturing; scrubbing and clothes for theatre; urinary catheterisation.

Physical examinations

Cardiovascular examination; respiratory examination; abdominal examination; chest and breast examination.

(GNK 289) Anatomy 286 – 15 lectures per week E

(Semester module – 40 credits)

Prerequisite: GNK 286, GPS 280, FSG 270, MDB 270, POH 270, ODO 270, PRD 270, ZUL 110, AFR 111, IDE 270

Clinically applied regional approach to human anatomy. Detailed cadaveric dissection of the head and neck, brain and spinal cord, axilla, upper limb, thorax, back and abdomen. Particular emphasis will be given to the head and neck region. The perineum, pelvis and lower limb will not be dissected, but taught with the aid of prosected specimens.

(IDE 270) Integrated dentistry 270 – 1 lecture, 1 other contact session and 2 practicals per week E

(Year module – 37 credits)

Prerequisite: GNK 286, GNK 289, GPS 280, FSG 270, MDB 270, POH 270, ODO 270, PRD 270, ZUL 110, AFR 111

- Clinic visits and visits to a dental practice
- Patient administration training
- Psychomotor skills training (model casting, carving of teeth out of plaster, wax work, wire bending)
- Pre-clinical communication training – building up rapport with a patient and interviewing skills (commences in the second semester)
- Examination skills training (commences in the second semester)

(Pass with distinction)

(MDB 270) Oral Biology 270 – 2 lectures per week E

(Year module – 11 credits)

Prerequisite: PHY 131, MGW 112, MLB 111, MTL 180, CMY 151, FIL 155, GNK 188, IDE 170, POH 170, SEP 110/ELH 111,112, AIM 101

This module is the study of the development, macroscopic and microscopic structure and function of tissue of the mouth and related structures with emphasis on the application in clinical dentistry. This module also includes the study of relevant molecular biology.

(Pass with distinction)

(POH 270) Public Oral Health 270 – 1.5 lectures per week E

(Year module – 12 credits)

Prerequisite: GNK 286, GNK 289, GPS 280, FSG 270, MDB 270, IDE 270, ODO 270, PRD 270, ZUL 110, AFR 111

- Orientation to health sciences research
- Ethical consideration in the conduct of health sciences research
- An overview of the research process
- Selecting or identifying research problems
- The literature review
- Refining and defining the research question, formulating a hypothesis and preparing a research proposal
- Quantitative research
- Non-traditional and qualitative research designs
- Sampling
- Data collection and Data quality
- Data analysis
- Research reports and report evaluation

(Pass with distinction)

(PRD 270) Prosthodontics 270 – 1 practical per week E

(Year module – 3 credits)

- Basic tooth morphology
- Introduction to dental laboratory procedures in Removable Prosthodontics

(ODO 270) Odontology 270 – 1 clinical session per week E

(Year module – 6 credits)

Prerequisite: GNK 286, GNK 289, GPS 280, FSG 270, MDB 270, IDE 270, POH 270, PRD 270, ZUL 110, AFR 111

Chair-side assisting:

This clinical training entails the chair-side assisting of senior dental students during the treatment of patients.

(Pass with distinction)

(FSG 270) Physiology 270 – 6 lectures and 1 practical per week E

(Year module – 72 credits)

Prerequisite: GNK 286, GNK 289, GPS 280, MDB 270, POH 270, ODO 270, PRD 270, ZUL 110, AFR 111, IDE 270

Building blocks and metabolism of molecules, muscle and neurophysiology, cerebrospinal fluid and the special senses. Body fluids; haematology; cardiovascular physiology and the lymphatic system. Structure, gas exchange and non-respiratory functions of the lungs; structure, excretory and non-urinary functions of the kidneys, acid-base balance, as well as the skin and body temperature control. Nutrition, digestion and metabolism; hormonal control of the body functions and the reproductive systems. Where appropriate, case studies will be discussed in order to demonstrate the practical application of the gained physiological knowledge to the clinical management of a dental patient. Practical work to complement the theory.

(Pass with distinction)

2020 BCHD

(FAR 370) Clinical Pharmacotherapy 370 – 2 lectures and 1 discussion class per week E

(Year module – 8 credits)

Introductory principles of clinical pharmacotherapy in view of applicable patient problems, receptors for medicines, principles of structure activity relationships, dynamic and kinetic principles to bring pharmacological principles and clinical therapy together in a problem-based curriculum.

(Pass with distinction)

(ODO 370, 470 and 570) Odontology 370, 470 and 570 – 2 lectures, 1 discussion class and 2.6 practicals per week E

(Year modules – 43, 63, 52 credits respectively) (2020, 2021, 2022)

The modules in the subject Odontology form an integrated curriculum that is structured and presented by various lecturers from different departments of the School. The modules consist of theoretical, practical and clinical training presented during the third, fourth and fifth years of study. The theoretical training includes anatomy, embryology, histology, microbiology and pathology of the teeth and teeth structure, while the clinical training is focused on the preventive, curative, and minor rehabilitative treatment of teeth development and eruption malformations, dental caries, pulpal and peri-radicular pathology, unerupted and impacted teeth, and tooth wear as part of the ageing process.

(Pass with distinction)

(OFC 370, 470 and 570) Oro-Facial Surgery 370, 470 and 570 – 3 lectures and 1 practical per week E

(Year modules – 12, 41, 42 credits respectively) (2020, 2018, 2019)

Surgical Anatomy: Applied surgical anatomy.

Examination, anaesthesia, distress: Examination of a surgical patient, stress control and sedation, local anaesthetics, local anaesthetic techniques, applied pharmacology and prescription (synoptic), emergency procedures.

Basic Oral Surgery: Sterilisation and disinfection, oral surgical armamentarium, exodontia and related complications, bleeding problems, antrum.

Advanced Oral Surgery: Apicectomy, impactions, electro and cryosurgery, soft tissue infections and osteomyelitis, pre-prosthetic surgery (review).

Basic Maxillo-Facial Surgery: Traumatology, surgical pathology, neuralgias, temporomandibular joint derangements.

Advanced Maxillo-Facial Surgery: Micro surgery (review), orthognathic surgery, facial cleft deformities, cranio-facial surgery (review).

(PDL 370, 470 and 570) Periodontology 370, 470 and 570 – 2 lectures per week E

(Year modules – 7, 8, 16 credits respectively) (2020, 2021, 2022)

The modules in the subject are offered in the third, fourth and fifth years of study. The depth and weighting of the knowledge base and the clinical application and interpretation of the modules will be dependent on the year of study.

The goal is to educate and train general dental practitioners who will be able to apply their expertise and knowledge in the prevention and treatment of periodontal diseases in both the public and private sectors within the scope of the dental

practitioner. In order to achieve this, the student must know the embryology, normal anatomy, histology and functions of the periodontium. The student must understand the aetiology, pathogenesis, the risk and other factors associated with the various forms of periodontal diseases, and their classification. The student must be able to perform a comprehensive clinical examination and use the information so gained to arrive at a diagnosis and treatment plan. The student must become proficient in applying preventive control methods, to supply oral hygiene methods and applicable instructions to the patient; motivating the patient; scaling and root planing; be able to correctly evaluate the tissue response to these procedures; be able to differentiate clinically between the various forms of periodontal disease and be able to perform clinical procedures associated with the treatment of early and moderate stages of periodontal diseases. The student must understand the treatment possibilities associated with established and advanced periodontal diseases, including regenerative procedures and implant treatment, and when and to whom, such patients should be referred for specialist diagnosis and treatment, should this be necessary.

(Pass with distinction)

**(RAD 370) Diagnostic Imaging 370 – 1 lecture, 1 discussion class and 2 practicals per week E
(Year module – 8 credits)**

A course of one full academic year's duration comprising: origin and physical properties of X-rays; modus operandi of dental X-ray machine; practical and applied dental radiography; radiation biology and radiation protection; radiological anatomy of teeth and tooth-bearing regions; principles of radiological interpretation.

**(TGG 370) Applied Medicine 370 – 1 practical and 1 discussion per week E
(Year module – 11 credits)**

The purpose of this module is to enable the dentist to identify medical problems, which may have an effect on the dental treatment or may affect the patient's general health. The dentist must be able to interpret the patient's medical history, in order to modify the treatment plan accordingly to ensure a safe dental treatment and/or to refer the patient for medical or specialist care.

**(PRD 370, 470) Prosthodontics 370 and 470 – 3 lectures, 3 practicals and 2 discussion classes per week E
(Year modules – 41, 26 credits respectively) (2020, 2021)**

Examination and evaluation of the denture patient, principles and taking of impressions, determination of vertical and horizontal jaw relations and facial bow recording. Aesthetics. Fitting and placing of the finished denture. Post treatment. Clinical aspects of manufacturing of complete and partial dentures, obturators and special apparatus.

**(ORD 370, 470 and 570) Orthodontics 370, 470 and 570 – 1 lecture, 1 practical and 1 discussion class per week E
(Year module – 6, 21, 22 credits) (2020, 2021, 2022)**

The modules in this subject extend over the third, fourth and fifth years of study. Lectures, practical and clinical work, seminars and discussions on the following:

- (a) Basic principles and therapeutic measures.
- (b) Occlusion: development and morphology.
- (c) Development and growth: cranium.
- (d) Stainless steel: properties and uses.
- (e) Orthodontic devices: requirements and types.
- (f) Changes in tissue.
- (g) Malocclusion: classification and aetiology.
- (h) Examination, aids, diagnosis and planning.
- (i) Bad habits.
- (j) Preventive and interceptive orthodontics.
- (k) Treatment: principles, problems with space, methods.
- (l) The role of extraction.
- (m) Retention.

(ANP 370) Anatomical pathology 370 – 4 lectures per week for semester 1 and 6 other contact sessions per week or 5 weeks E

(Year module – 22 credits)

General pathology

- Cell injury, death and adaptation
- Acute and chronic inflammation
- Repair: Cell regeneration, fibrosis and wound healing
- Hemodynamic disorders, thrombosis and shock
- Disorders of the immune system

- Neoplasia
- Environmental diseases
- General pathology of infectious diseases

Diseases of the following organ systems

- Blood vessels
- Heart
- Haemopoietic and lymphoid systems
- Respiratory tract
- Urinary tract
- Gastrointestinal tract
- Liver and biliary tract
- Pancreas
- Male genital system
- Female genital system and breast
- Endocrine system
- Musculoskeletal system
- Skin
- Nervous system

(Pass with distinction)

(POH 370) Public oral health 370 – 1 lecture per week E

(Year module – 4 credits)

- Oral epidemiology
- Prevention and oral health promotion
- Health services (systems)

(Pass with distinction)

(GPS 370) Generic Procedural Skills 370 – 1 practical per week E

(Semester module – 5 credits)

Aims of the module

- Develop skills integrated with Blocks 6,7 and 8.
- Develop skills that students will be expected to apply during various practical rotations.

Practical Sessions

- The class is divided in groups and students are expected to strictly keep to these groups. To ensure that all students get adequate opportunity to do the practical and not only observe, it is expected that they attend the sessions as scheduled.
- Skills are practiced under supervision which supplies sufficient opportunity for interaction with the lecturers.
- Attendance of practical sessions is compulsory.

Theory: Career Exposure Risks

The content of two documents that were issued at registration will be discussed during the practical sessions on aseptic techniques.

Objective Structured Practical Evaluation (OSPE)

The aim with this is to assess the students are able to do the following:

- (c) To execute a procedure in such a way that:
- the aim of the procedure is reached
 - the patient is not disadvantaged by, for example, contamination during aseptic technique
 - precautionary measures are followed to prevent blood transferable diseases.
- (d) To execute the technique of a physical examination correct, complete and professionally.

Procedures

Measuring of central venous pressure; arterial puncture; gastric lavage; nasogastric intubation; skin suturing; scrubbing and clothes for theatre; urinary catheterisation.

Physical examinations

Cardiovascular examination; respiratory examination; abdominal examination; chest and breast examination.

(TBW 370, 470 and 570) Comprehensive Patient Management 370, 470 and 570 – E

(Year modules – 18, 12, 16 credits respectively) (2020, 2021, 2022)

Holistic evaluation of a patient, the clinical hypothetic-deductive reasoning processes, diagnosis, prognosis and treatment planning. Under the guidance of a tutor, and by utilising a special "practice patient" file, the students start treating a "practice patient" comprehensively. The student compiles a portfolio, on a continuous basis, on the clinical and administrative procedures concerning the practice patient. The portfolio contains the student's year mark, which is determined on a 50:50 basis with the examination mark as the final pass mark. The examination mark is determined when the student presents the practice patient case to an audience and a panel of adjudicators. Application of business management principles during patient management. Preparing the student for a meaningful and successful career in an increasingly complex business and healthcare environment. Application of certain principles and skills in terms of: Psychology in the dentistry practice; Political parameters in dentistry; Sociology and dentistry; Ethics for the dentist; Career possibilities; Management of a practice; Additional to this, students should understand the economic, cultural, legal and regulatory environment to establish and optimise patient management.

(Pass with distinction)

2021 BCHD

(RAD 470 and 570) Diagnostic imaging 470 and 570 – 1 lecture, 1 discussion class and 1 practical per week E

(Year module – 13, 8 credits respectively) (2021, 2022)

Diagnostic imaging 370/470 is a two year course delivered during the 3rd and 4th years of the BChD programme. It deals with all aspects of radiographic imaging of the maxillofacial region appropriate to the Dentist. Diagnostic imaging 370 is delivered during BChD III as a promotion course. Diagnostic imaging 470 is an examination course delivered during BChD IV. The purpose of Diagnostic imaging 470 is: - To formalise teaching and examination of Diagnostic Imaging 370/470. - To certify students' ability to apply knowledge obtained in Diagnostic Imaging 370 to clinical and practical situations of Diagnostic Imaging. - To certify that students act professionally during clinical situations of Diagnostic Imaging.

(Pass with distinction)

(MFP 470 and 570) Maxillo-Facial Pathology 470 and 570 – 1 lecture, 1 discussion class, 1 practical and 1 observation class per week E

(Year modules – 11, 10 credits respectively) (2021, 2022)

The modules in this subject will empower the student with knowledge of the embryology, anatomy, physiology and pathology of the oral mucosa, the salivary glands, intra- and extraoral soft tissue and bone in order to diagnose and manage lesions, diseases and conditions of the oral mucosa, salivary glands, intra and extraoral soft tissue and bone.

(Pass with distinction)

(TMZ 470) Anaesthesiology 470 – 1 lecture and 1 discussion class per week E

(Year modules – 16 credits)

Consist of the module: Anaesthesiology in the fourth year it entails 30 lectures and 50 hours theatre co-assistance. General introduction: Objectives of general anaesthetics, purpose of pre-operative visit to the patient. Suitability for anaesthetics; prescription of pre medication aimed at preparation of the patient and possible interactions with anaesthetic agents (e.g. tranquilisers, analgesics, anti cholinergics, etc.) prescribed to improve the patient's condition. Induction methods and the use of intravenous agents, especially sodium pentothal, methohexitone, propanidid, alphathesin, diazepam, dioperidol; patient control during induction. Anaesthetic apparatus. Techniques for maintenance of anaesthesia. Use of relaxants. Artificial ventilation. Maintenance of acid-base balance, maintenance of fluid balance, central venous pressure. Complications which can occur during anaesthesia and the management thereof. Care of the unconscious patient and cardiopulmonary resuscitation, dysrhythmia during anaesthesia. Local anaesthesia: Techniques, agents and toxicity

(Pass with distinction)

(POH 470 and 570) Public oral health 470 – 1 lecture per week E

(Year modules – 6, 5 credits respectively) (2021, 2022)

- Oral epidemiology
- Prevention and oral health promotion
- Health services (systems)
- Community engagement projects commence

(Pass with distinction)

2022 BChD

(RAD 470 and 570) Diagnostic Imaging 470 and 570 – 1 lecture, 1 discussion class and 1 practical per week E
(Year module – 13, 8 credits respectively) (2021, 2022)

Diagnostic imaging 370/470 is a two year course delivered during the 3rd and 4th years of the BChD programme. It deals with all aspects of radiographic imaging of the maxillofacial region appropriate to the Dentist. Diagnostic imaging 370 is delivered during BChD III as a promotion course. Diagnostic imaging 470 is an examination course delivered during BChD IV. The purpose of Diagnostic imaging 470 is: - To formalise teaching and examination of Diagnostic Imaging 370/470. - To certify students' ability to apply knowledge obtained in Diagnostic Imaging 370 to clinical and practical situations of Diagnostic Imaging. - To certify that students act professionally during clinical situations of Diagnostic Imaging.

(MFP 470 and 570) Maxillo-Facial Pathology 470 and 570 – 1 lecture, 1 discussion class, 1 practical and 1 observation class per week E
(Year modules – 11, 10 credits respectively) (2021, 2022)

The modules in this subject will empower the student with knowledge of the embryology, anatomy, physiology and pathology of the oral mucosa, the salivary glands, intra- and extraoral soft tissue and bone in order to diagnose and manage lesions, diseases and conditions of the oral mucosa, salivary glands, intra and extraoral soft tissue and bone.

(Pass with distinction)

(ODO 370, 470 and 570) Odontology 370, 470 and 570 – 2 lectures, 1 discussion class and 2.6 practicals per week E
(Year modules – 43, 63, 52 credits respectively) (2020, 2021, 2022)

The modules in the subject Odontology form an integrated curriculum that is structured and presented by various lecturers from different departments of the School. The modules consist of theoretical, practical and clinical training presented during the third, fourth and fifth years of study. The theoretical training includes anatomy, embryology, histology, microbiology and pathology of the teeth and teeth structure, while the clinical training is focused on the preventive, curative, and minor rehabilitative treatment of teeth development and eruption malformations, dental caries, pulpal and peri-radicular pathology, unerupted and impacted teeth, and tooth wear as part of the ageing process.

(OFC 370, 470 and 570) Oro-Facial Surgery 370, 470 and 570 – 3 lectures and 1 practical per week E
(Year modules – 12, 41, 42 credits respectively) (2020, 2021, 2022)

Surgical Anatomy: Applied surgical anatomy.

Examination, anaesthesia, distress: Examination of a surgical patient, stress control and sedation, local anaesthetics, local anaesthetic techniques, applied pharmacology and prescription (synoptic), emergency procedures.

Basic Oral Surgery: Sterilisation and disinfection, oral surgical armamentarium, exodontia and related complications, bleeding problems, antrum.

Advanced Oral Surgery: Apicectomy, impactions, electro and cryosurgery, soft tissue infections and osteomyelitis, pre-prosthetic surgery (review).

Basic Maxillo-Facial Surgery: Traumatology, surgical pathology, neuralgias, temporomandibular joint derangements.

Advanced Maxillo-Facial Surgery: Micro surgery (review), orthognathic surgery, facial cleft deformities, cranio-facial surgery (review).

(ORD 370, 470 and 570) Orthodontics 370, 470 and 570 – 1 lecture, 1 practical and 1 discussion class per week E
(Year module – 6, 21, 22 credits) (2020, 2021, 2022)

The modules in this subject extend over the third, fourth and fifth years of study.

Lectures, practical and clinical work, seminars and discussions on the following:

- (a) Basic principles and therapeutic measures.
- (b) Occlusion: development and morphology.
- (c) Development and growth: cranium.
- (d) Stainless steel: properties and uses.
- (e) Orthodontic devices: requirements and types.
- (f) Changes in tissue.
- (g) Malocclusion: classification and aetiology.
- (h) Examination, aids, diagnosis and planning.
- (i) Bad habits.
- (j) Preventive and interceptive orthodontics.
- (k) Treatment: principles, problems with space, methods.
- (l) The role of extraction.
- (m) Retention.

(PDL 370, 470 and 570) Periodontology 370, 470 and 570 – 2 lectures per week A&E

(Year modules – 7, 8, 16 credits respectively) (2020, 2021, 2022)

The modules in the subject are offered in the third, fourth and fifth years of study. The depth and weighting of the knowledge base and the clinical application and interpretation of the modules will be dependent on the year of study.

The goal is to educate and train general dental practitioners who will be able to apply their expertise and knowledge in the prevention and treatment of periodontal diseases in both the public and private sectors within the scope of the dental practitioner. In order to achieve this, the student must know the embryology, normal anatomy, histology and functions of the periodontium. The student must understand the aetiology, pathogenesis, the risk and other factors associated with the various forms of periodontal diseases, and their classification. The student must be able to perform a comprehensive clinical examination and use the information so gained to arrive at a diagnosis and treatment plan. The student must become proficient in applying preventive control methods, to supply oral hygiene methods and applicable instructions to the patient; motivating the patient; scaling and root planing; be able to correctly evaluate the tissue response to these procedures; be able to differentiate clinically between the various forms of periodontal disease and be able to perform clinical procedures associated with the treatment of early and moderate stages of periodontal diseases. The student must understand the treatment possibilities associated with established and advanced periodontal diseases, including regenerative procedures and implant treatment, and when and to whom, such patients should be referred for specialist diagnosis and treatment, should this be necessary.

(Pass with distinction)

(POH 470 and 570) Public oral health 470 – 1 lecture per week E

(Year modules – 6, 5 credits respectively) (2021, 2022)

- Oral epidemiology
- Prevention and oral health promotion
- Health services (systems)
- Community engagement projects commence

(PRD 570) Prosthodontics 570 – 2 lectures, 4 practicals and 1 discussion class per week E

(Year modules – 31 credits)

Prerequisite: TBW 470, ODO 470, MFP 470, PDL 470, DFA 470, OFC 470, PRD 470, GAP 470, TMZ 470

Examination and evaluation of the denture patient, principles and taking of impressions, determination of vertical and horizontal jaw relations and facial bow recording. Aesthetics. Fitting and placing of the finished denture. Post treatment. Clinical aspects of manufacturing of complete and partial dentures, obturators and special apparatus. Pre-clinical crown and bridge techniques course. Examination and evaluation of patient's requiring crown and bridge treatment. Principles of tooth preparation and impression-making. Shade selection. Finishing and cementation of fixed restorations. Clinical aspects of manufacturing of single crowns and fixed prostheses. An introduction to lasers and implants.

(TBW 370, 470 and 570) Comprehensive Patient Management 370, 470 and 570 – E

(Year modules – 18, 19, 16 credits respectively) (2020, 2021, 2022)

Holistic evaluation of a patient, the clinical hypothetic-deductive reasoning processes, diagnosis, prognosis and treatment planning. Under the guidance of a tutor, and by utilising a special "practice patient" file, the students start treating a "practice patient" comprehensively. The student compiles a portfolio, on a continuous basis, on the clinical and administrative procedures concerning the practice patient. The portfolio contains the student's year mark, which is determined on a 50:50 basis with the examination mark as the final pass mark. The examination mark is determined when the student presents the practice patient case to an audience and a panel of adjudicators. Application of business management principles during patient management. Preparing the student for a meaningful and successful career in an increasingly complex business and healthcare environment. Application of certain principles and skills in terms of: Psychology in the dentistry practice; Political parameters in dentistry; Sociology and dentistry; Ethics for the dentist; Career possibilities; Management of a practice; Additional to this, students should understand the economic, cultural, legal and regulatory environment to establish and optimise patient management.

(Pass with distinction)