



**BAYERO UNIVERSITY KANO  
FACULTY OF DENTISTRY  
UNDERGRADUATE STUDENTS' HANDBOOK  
2024/2025 SESSION**





**PROF. AISHA KULIYA-GWARZO**

MBBS(ABU), FMCP (HEMATOLOGY)

**PROVOST, COLLEGE OF HEALTH SCIENCES**



## **PROF. BABATUNDE OLAMIDE BAMGBOSE**

B.D.S. (Lagos), D.D.S. (Nebraska), M.S. (Iowa), M.D., FMCDS (Oral and Maxillofacial Surgery), FWACS (Oral and Maxillofacial Radiology), Cert. Oral and Maxillofacial Radiology

**DEAN, FACULTY OF DENTISTRY**

## LEADERSHIP TEAM OF THE FACULTY OF DENTISTRY

NAME	DESIGNATION
Prof. Babatunde Olamide Bamgbose Department of Oral Diagnostic Sciences	DEAN
Dr Abdulmanan Yahaya Department of Child Dental Health	DEPUTY DEAN
Dr Chizoba Okolo Department of Child Dental Health	SUBDEAN (ACADEMICS)
Dr Fatima Sandabe Department of Preventive Dentistry	SUBDEAN (FACILITIES)
Dr Jamilu Alhassan Department of Child Dental Health	SUBDEAN (ALUMNI RESOURCES)
Dr Saleem Sa'ad Department of Oral Diagnostic Sciences	CHAIRMAN (ALUMNI RESOURCES)
Dr Abdulmanan Yahaya Department of Child Dental Health	ALUMNI RESOURCE COORDINATOR
Dr Jibril Muhammad Department of Child Dental Health	ALUMNI RESOURCE DEPUTY COORDINATOR

Dr Abdulrahman Malami Department of Child Dental Health	FACULTY EXAMINATION OFFICER
Dr Sabir Iya Department of Oral Diagnostic Sciences	ASSISTANT FACULTY EXAMINATION OFFICER I
Dr Abdulrahman Garba Department of Oral and Maxillofacial Surgery	ASSISTANT FACULTY EXAMINATION OFFICER II
Dr Akinwaleola Akinlade Department of Oral and Maxillofacial Surgery	QUALITY ASSURANCE OFFICER
Dr Feyi Ikusika Department of Restorative Dentistry	POSTGRADUATE COORDINATOR
Dr Tope Adeyemi Department of Child Dental Health	FACULTY RESEARCH COORDINATOR
Hajiya Rakiya Abdu Inusa	FACULTY OFFICER

## HEADS OF DEPARTMENTS




DR. OLUWAFEYISAYO F.  
IKUSIKA, BDS (Ib), FWACS

HEAD, DEPARTMENT  
OF RESTORATIVE  
DENTISTRY



DR. JAMIU ABANIKANDA, BDS  
(Ib), FMCDS

HEAD, DEPARTMENT  
OF PREVENTIVE  
DENTISTRY

<p>DR. ABDULRASHEED SULEIMAN, BDS (Lagos), FMCDS</p>	<p>HEAD, DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY</p>
<p> DR. ADETAYO ABORISADE, BDS (Ile-Ife), FMCDS</p>	<p>HEAD, DEPARTMENT OF ORAL DIAGNOSTIC SCIENCES</p>
<p>DR. YEWANDE ADEYEMO, BDS (Ib), FWACS</p>	<p>HEAD, DEPARTMENT OF CHILD DENTAL HEALTH</p>



## **LEVEL COORDINATORS:**

**BDS 100 L – Malam Ahmad (0803 533 7177)**

**BDS 200 L – Dr Olohigbe Alufohai (Department of Preventive Dentistry)**

**BDS 300 L – Dr Munir Iya (Department of Preventive Dentistry)**

**BDS 400 L – Dr Chibuzor Igweagu (Department of Restorative Dentistry)**

**BDS 500 L – Dr Jamiu Abanikanda (Department of Preventive Dentistry)**

**BDS 600 L – Dr Umar Bashir Mahmud (Department of Child Dental Health)**



## TABLE OF CONTENTS

Provost of the College of Health Sciences	Page 1
Dean of the Faculty of Dentistry	Page 3
Leadership Team of the Faculty of Dentistry	Page 4
Heads of Departments	Page 5
Level Coordinators	Page 7
Table of Contents	Page 8
Message from the Dean	Page 9
History of the BDS Program	Page 11
General Administration	Page 12
Students' Welfare	Page 13
Students' Academic Advising	Page 14
Pass Mark and Grading	Page 15
Professional Examinations	Page 16
Resit Examinations	Page 21
Graduation Requirements	Page 23
Training Curriculum Lecture Objectives	Page 24
Admission Requirements	Page 29
Course Content	Page 32
Course Outlines	Page 97

## **MESSAGE FROM THE DEAN FACULTY OF DENTISTRY**

### **THE POWER OF YOUR DREAMS**

While congratulating your admission into Dentistry at the Faculty of Dentistry of the Bayero University Kano, it is my wish to share with you some insight into the power of your dreams. Your career is a marathon and not a sprint. You must conserve your energy and strategize for the long journey ahead of you. The future you see is the future you get. Don't let the opinions of the average man sway you. Dream, and he thinks you're crazy. Succeed, and he thinks you're lucky. Acquire wealth, and he thinks you're greedy. Pay no attention. He simply doesn't understand. Keep going.

When making decisions for your future, keep in mind that decisions are tentative; you can change your mind. There is usually no one right choice. Deciding is a process, not a static one-time event. We are constantly reevaluating our decisions in light of new information. When it comes to a career decision, remember you are not choosing for a lifetime. Choose for now and do not worry whether you will still enjoy it in 20 years. Life is fluid and change occur. Remember there is a big difference between decision and outcome. The decision is within your control, the outcome is not. All decisions have an element of risk.

As you proceed from this point, you must realize that the pursuit of your dream is **HARD**. You must consistently and tenaciously work at it. You must have a strong **WHY** in every step you take. The “**WHY**” in your pursuit will drive you towards your goal. You must be **HUNGRY**. Complacency will stall your progress. You must be willing to **SERVE** others. There is a reward in service. You must be willing to

WORK HARD and make SACRIFICES. You must have the ability to TUNE OUT life's distractions. You must surround yourself with LIKE-MINDED people. You must be willing to INVEST in your dreams. You must have PRODUCTIVITY as against ACTIVITY. You must never Quit.

I wish you all the best!

Prof. Babatunde O. Bamgbose  
Dean, Faculty of Dentistry

## **GENERAL INFORMATION ON THE PROGRAMME**

### **HISTORY OF THE PROGRAMME/SUB-DISCIPLINE/DISCIPLINE**

The Dental & Maxillofacial Department started in 2000 as a part of the Specialty Clinics at the Aminu Kano Teaching Hospital, Kano. The Department grew quickly and received accreditation for Residency Training from both the Nigerian Medical Postgraduate College and the West African College of Surgeons. The success of the Clinical Postgraduate Training Program informed a proposal written to the Bayero University, Kano (BUK) to start a Dental School for Undergraduate Bachelor of Dental Surgery, BDS, Training. BUK embraced the vision and National Universities Commission (NUC) gave their approval to the Faculty of Dentistry, Bayero University Kano. The Faculty was established on 29<sup>th</sup> September, 2010, with five Departments.

In the year 2016, the Faculty graduated its first set of indigenously trained dentists. By the Year 2024, the Faculty had graduated eight sets of Dental Surgeons, BDS. The total number of students graduated as at the Year 2024 was 117. The Medical and Dental Council of Nigeria (MDCN) observers for the first professional examination at the Faculty were impressed with the conduct of the Final Professional Examinations.

In 2019, the Bayero University, Kano employed six of the seven pioneer dental students as academic staff of the Faculty. Three of the pioneer dental students are currently enrolled in the PhD (Dental Surgery) program at the Faculty, and the entire seven students are employed at the Aminu Kano Teaching Hospital as Resident Doctors in the Postgraduate Fellowship Programs of both the National Postgraduate Medical College of Nigeria and the West African College of Surgeons. This achievement is in line with the founding cardinal objectives of the Faculty: To Train and Retain our Products for the Growth of the Faculty.

The Faculty commenced Postgraduate Masters and PhD Programs in Dental Surgery in the Year 2024.

## **GENERAL ADMINISTRATION**

### **Personnel Administration**

#### ***(a) Organizational structure***

The Faculty of Dentistry is one of five Faculties within the College of Health Sciences, including Faculty of Clinical Sciences, Faculty of Allied Health, Faculty of Basic Medical Sciences, Faculty of Basic Clinical Sciences, and Faculty of Dentistry. The College is led by the Provost while the Deans lead the Faculties. Dental students undergo training in all five of the above-listed Faculties. Each Department is led by an academic staff as Head of the Department. The College has two Deputy Provosts, one for academic and the other for administrative affairs while Faculties also have deputy deans, sub-deans and examination officers.

The Provosts, Deputy Provosts and Deans in the College of Health Sciences are as listed below:

**PROVOST: Prof Aisha Kuliya Gwarzo**

**DEPUTY PROVOST (ACADEMICS): Prof Isyaku Yarube**

**DEPUTY PROVOST (ADMINISTRATION): Prof Bashir Kaka**

**DEAN, FACULTY OF CLINICAL SCIENCES: Dr Idris Mohammed**

**DEAN, FACULTY OF BASIC MEDICAL SCIENCES: Dr Rabiu Inuwa Fage**

**DEAN, FACULTY OF ALLIED HEALTH SCIENCES: Dr Jibril Mohammed**

**DEAN, FACULTY OF BASIC CLINICAL SCIENCES: Prof Aminu Mohammed Zakari**

**DEAN, FACULTY OF DENTISTRY: Prof. Babatunde O. Bamgbose**

## **FACULTY OF DENTISTRY, BAYERO UNIVERSITY KANO**

**DEAN: PROF. BABATUNDE BAMGBOSE BDS, DDS, MS, FMCDS, FWACS, MD**

**DEPUTY DEAN: DR ABDULMANAN YAHAYA, B.D.S.(Ib), FWACS**

**SUB-DEAN (ACADEMICS): Dr Chizoba Okolo, BDS (Benin), FWACS**

**SUB-DEAN (FACILITIES): Dr Fatima Sandabe, BDS (Maiduguri), FMCDF**

**SUB-DEAN (ALUMNI RESOURCES): DR. JAMILU ALHASSAN, B.D.S.(Kano)**

**FACULTY EXAMINATION OFFICER: DR. MALAMI, B.D.S.(Maiduguri), FWACS**

**POSTGRADUATE COORDINATOR: Dr. Francis O. Ikusika BDS (UI) 2000, FWACS 2013**

**FACULTY OFFICER Rakiya Abdu Inusa**

### **5.2 Student's Welfare**

Student welfare is important. Student welfare is the primary responsibility of the Dean, Student Affairs, Bayero University Kano. Most dental students are given accommodation on campus to allow them focus on their studies. Reading rooms and common rooms are provided for our students. The University library facilities are designed to be user friendly. Wireless networks are available for internet connectivity.

Once the students come to the Faculty of Dentistry, they have at their disposal our Students Common room and the College of Health Sciences Library. The library is well equipped with relevant soft and hard copies of textbooks for all fields of dentistry.

#### **(a) Handling of academic grievances**

Student grievances are usually first brought to the relevant Level Coordinator. The Level Coordinators take all student related issues and grievances seriously. They use all resources at their disposal to adequately address students' grievances. This includes communicating student grievances to other relevant parties such as Heads of Departments and the Sub-Dean Academics.

The Sub-Dean Academics handles all student related issues for the faculty of Dentistry. The Sub-Dean communicates students' grievances with the Heads of Departments and if necessary, the Dean or Deputy Dean. Most grievances are resolved at the level of Heads of Departments.

Student grievances that are serious or affect majority of the student population are brought to the faculty board for resolution. The students are often represented when the issues are discussed. Dental students are also at liberty to direct their grievances directly to the Sub-Dean Academics, the Deputy Dean or the Dean.

In general, our students have an excellent relationship with the lecturers and staff and this reflects in their focus on the studies and clinical work.

**(b) Student academic advising**

All dental students have Level Coordinators who guide them through students' course load and course registration. The level coordinator is the students first guide in academic matters. Level coordinators also play a role in student mentoring.

Students are mentored by their lecturers with the assistance of the Heads of Departments and their academic adviser and counsellor, as needed. Each course also has a course coordinator for students to channel questions or concerns.

**Examination**

- (a) Setting, conduct, evaluation schemes, moderation schemes – Internal and External - for degree examinations and the issuance of results.

The following regulations pertain to the conduct of the Bachelor of Dental Surgery (BDS) program.

**Pass Mark and Grading**



The pass mark for all courses in the College of Health Sciences shall be 50%. Fractional marks are to be rounded to the nearest whole number. In addition to an overall score of 50%, a candidate must also score a minimum of 50% in the clinical component section of all clinical subject examinations.

Courses for Level II and higher levels are to be graded and classified as follows:

*Mark/Score*

70% and above	DISTINCTION
60–69%	CREDIT
50–59%	PASS
00–49%	FAIL

However, a student who has a resit in another subject at the level, or who is required to repeat the year does not earn a distinction.

A score of 50% (C, Pass) shall be recorded for any student who passes a course at a re-sit examination.

**Subject and Sessional Assessments**

All the major Level I Courses are to be assessed on subject basis by combining the marks of all the courses in a subject area and finding their weighted average, with the credit values of courses serving as their weights. Thus, single marks are to be reported for Biology, Chemistry, Physics and Mathematics.

Students in the Faculty are to be assessed on a sessional basis. Professional examinations (where applicable) are conducted on a sessional basis.

**Progression to Level II**

To progress from Level I to II in any program in the Faculty of Dentistry a student must pass all four major Level I subjects (Biology, Chemistry, Physics and Mathematics). However, any Level I GSP course not passed can be carried over.

**First and Second Professional Examinations**

BDS students are to sit for the First and Second Professional Examinations at the end of Levels II and III, respectively. The following are the regulations governing these examinations.

1. To progress to Level III, a student must pass all the subjects examined in the First Professional Examination.
2. To progress to Level IV, a student must pass all the subjects examined in the Second Professional Examination.
3. A student who fails all the subjects of the First or Second Professional Examination shall be required to withdraw from the program.
4. A student who fails three subjects of the First or Second Professional Examination shall be required to repeat the year, subject to 18.15 (a).
5. A student who fails one or two subjects in the First or Second Professional Examination shall re-sit the examinations for the failed subjects within such period as may be set by the College Academic Board.
6. A student who fails a re-sit examination shall repeat the year, subject to 18.15 (b), below.
7. To remain in the program, a candidate must pass the Second Professional Examination within four years of entering Level II.

### **Third and Fourth (and Fifth for BDS) Professional Examinations**

BDS candidates are to sit for the Third, Fourth and Fifth Professional Examinations over the same period. The following are the regulations for the examinations.

1. To proceed to Level V, a candidate must pass both subjects of the Third Professional Examination.
2. To proceed to Level VI, a BDS candidate must pass all the subjects of the Fourth and Fifth Professional Examinations.
3. A student who fails one or both subjects at any of the examinations shall take a re-sit examination in the failed subject(s) after such period as may be set by the College Academic Board.
4. Subject to the provisions of 1 below, a student who fails one or more subjects at a re-sit examination shall repeat the subjects year by undergoing the appropriate courses of instruction.
5. All BDS students must obtain a pass mark in level 400 continuous assessment in both Medicine and Surgery (M1 and S1)
  - i. That failure in each of the courses in 5 above shall not amount for a student to repeat a year but a pass mark must be obtained in each of the courses before graduation.
  - ii. That if a student failed either of the courses in 5 above She/He can return to attempt it with the next class until it is passed or until the student exhausted the maximum period of stay in the University.

### **Final Professional Examinations**

The Fifth Professional Examination is the final examination of the MBBS while the sixth is the final one for BDS program. The examinations are covered by the following regulations.

To earn the MBBS or BDS degree, a candidate must pass all the subjects of the respective final Professional Examination.

A candidate who fails in one or more subjects in the final Professional Examination shall take the re-sit examination in the failed subject(s) after such period as may be set by the College Academic Board.

A candidate who fails the re-sit examination in any of the subjects shall be required to repeat the subjects by undergoing the appropriate courses of instruction in the subjects and then presenting him/herself again for examinations in the next available examination. This, however, is subject to 1 below.

#### Maximum Duration of the Programmes

1. The maximum duration of the BDS programme is 11 years, subject to the following limitations.
  - i. Not more than five years shall be spent at Pre-Clinical Level (Levels I to III).
  - ii. Not more than six years shall be spent at Clinical Level (Levels IV to VI).
  - iii. Not more than two years shall be spent at any of Levels II to VI.
  - iv. However, in exceptional circumstances, the Senate may determine the outcome of

the candidate withdrawn after exhausting the maximum duration following the recommendations of the College Academic Board.

#### **CLINICAL EXAMINATIONS IN THE COLLEGE OF HEALTH SCIENCES**

1. A student in the clinical years must have at-least 85% attendance.
2. The attendance eligibility criterion should be clearly spelt out to include attendance at laboratory and clinical activities like clinics, ward rounds and theatre sessions as well as completion of procedures outlined in the clinical logbooks.
3. It may also be necessary to indicate that students who will not be allowed to write examinations following failure to meet this eligibility criterion should be notified at least 2 weeks to the examinations
4. BDS program has 6 professional examinations. The first three are domiciled with the Faculty of Clinical Sciences and are regarded as first MBBS professional exam, second MBBS professional exam and third MBBS professional exam while the next three are domiciled in the Faculty of Dentistry are regarded as first BDS professional exam, second BDS professional exam and third BDS professional exam.

## **Withdrawal from the Program**

The College / Faculty Academic Board shall recommend to Senate the withdrawal of candidates from the BDS program on any of the following grounds:

1. Failure to register within the time set by Senate for registration.
2. Failing two or more of the four major Level I subject.
3. Failing all the subjects of the First or Second Professional Examinations for BDS.
4. Where a student is required to repeat a Level that has been already repeated.
5. Failure to attend classes for a period which exceeds 30 consecutive days except upon approved medical or other grounds (Section 11.3)
6. Failure to complete the stated requirements for the award of a degree within the maximum number of semesters laid down for the program (18.15).
7. Failure to sit for the entire semester or professional examinations without any admissible reason.

## **BDS DEGREE 1<sup>st</sup> PROFESSIONAL (PART IV EXAMINATION) (*Preclinical*)**

The subject for the BDS degree Part IV Examination shall be Laboratory Techniques in Dentistry, which consists of:

1. **Oral Biology**
2. **Operative Technique**
3. **Science of Dental Materials**
4. **Prosthetics Technique**

- i. To pass the BDS degree Part IV Examination, each candidate must score a minimum of 50 percent in all sections of the subject.
- ii. No candidate shall be admitted to the BDS Degree Part IV Examination unless he has passed in all subjects of the Part III Examination.
- iii. Candidates who fail to satisfy the examiners in the subject of the examination may proceed with their clinical posting in dentistry but must submit themselves for re-examination after eight weeks of remediation.
- iv. Candidates who fail to satisfy the examiners in the subject of the examination at the second attempt will be deemed to have failed the entire examination. They will not be permitted to proceed to the Part IV Final Examination, but after repeating the course of instruction they may re-enter for the entire Part III Examination the following year. If successful, they will then repeat the posting leading to the Part IV Final Examination.
- v. No candidate may proceed to the Part V Final Examination unless he/she has passed the subject of the Part IV Examination.

vi. In the BDS Degree Part IV Examination, candidates who – after repeating the year – fail the subject at a resit examination shall be asked to withdraw from the programme.

### **BDS DEGREE 2<sup>nd</sup> PROFESSIONAL (PART V FINAL EXAMINATION) (500L)**

The subjects for the BDS Degree Part V Final Examination shall be:

1. **Oral Diagnostic Sciences** (Oral Biology & Pathology, Oral Medicine, Oral & Maxillofacial Radiology)
2. **Child Dental Health** (Orthodontics & Paedodontics)

i. To pass the BDS Degree Part V Final Examination, candidates must score a minimum of 50 percent in oral pathology and 50 percent in child oral health.

ii. No candidate shall be admitted to the BDS Degree Part V Final Examination unless he has passed in the subject of the Part IV Final Examination.

iii. Candidates who fail to satisfy the examiners in the subjects of the examination may proceed with their clinical posting in dentistry but must submit themselves for re-examination after 12 weeks of remediation.

iv. Candidates who fail to satisfy the examiners in the subject of the examination at the second attempt will be deemed to have failed the entire examination. They will not be permitted to proceed to the Part VI Final Examination, but after repeating the course of instruction they may re-enter for the entire Part V Final Examination the following year. If successful, they will then repeat the posting leading to the Part VI Final Examination.

v. No candidate may proceed to the Part VI Final Examination unless he/she has passed the subjects of the Part V Final Examination.

vi. In the BDS degree Part V Final Examination, candidates who – after repeating the year – fail the subject at a resit examination shall be asked to withdraw from the programme.

### **BDS DEGREE 3<sup>rd</sup> PROFESSIONAL (PART VI FINAL EXAMINATION) (600L)**

The subjects for the BDS Degree Part VI Final Examination shall be:

1. **Oral and Maxillofacial Surgery**
2. **Restorative Dentistry**
3. **Periodontology and Dental Public Health**

#### 4. Dental Practice Management

- i. To pass the BDS degree Part VI Final Examination, candidates must score a minimum of 50 percent in each of the subjects.
- ii. No candidate shall be admitted to the BDS Degree Part VI Final Examination unless he has passed the subjects of the Part V Examination.
- iii. Candidates attempting the Part VI Final Examination for the first time shall present themselves for examination in the subjects upon satisfactory completion of the requisite postings.
- iv. Candidates must present themselves for examination in all the subjects for the first occasion.
- v. Candidates who fail to satisfy the examiners in the two subjects of the examination must submit themselves for re-examination in those subjects in which they failed after a minimum of 12 weeks of remediation in the appropriate courses of instruction.
- vi. Candidates who fail to satisfy the examiners in any of the subjects of the Part VI Examination at the second attempt will be deemed to have failed the entire examination. They may re-enter for the entire Part VI Final Examination in the following year.
- vii. Candidates who repeat the year and are then referred in any of the subjects will be allowed a final attempt at the referred subjects at the next resit examination. Failure at this fourth and final attempt will result in withdrawal from the programme.
- vii. Dental Practice Management is a non-examinable course, but a requirement for graduation. Students are required to pass all the assignments and tasks during the course.

#### **FORMAT OF THE BDS EXAMINATIONS**

Shall be as determined by the university Senate

#### **GENERAL NOTES**

The 50 percent pass mark notwithstanding, to pass each part of the BDS degree final examination, candidates shall satisfy the examiners in their “character and learning.”

Candidates shall be required to fulfil the following to qualify to sit for each part of the BDS degree examinations:

- i. A minimum of 75 percent attendance of didactic and practical/clinical teaching sessions. For this purpose, a student would be deemed to have attended a teaching session only if he/she was present for at least 75 percent of the allotted time.

- ii. Without prejudice to the above, completion to the satisfaction of the college of approved practical/clinical course work as may be defined in the departmental syllabi. These shall be recorded in a portfolio comprising evidence of learning activities for each posting done. This shall include:
  - a. Reports on practical sessions in the core and applied basic sciences.
  - b. Report on community/social field trips/visits and experience in PSM/Community Medicine, as well as clinical science postings.
  - c. Clerking in the clinical science postings.
  - d. Logbook of procedures.
  - e. Other evidence of individual and group self-directed learning activities
  - f. Evidence of formative assessments.
  - g. Letters attesting satisfactory conduct from tutorial masters and other teachers, as appropriate.
  - h. The student's evaluation of the posting (inclusive of the evaluation of the teachers).
  - i. An overall statement of competencies acquired during the posting and contribution of the same to the curricular objectives of the BDS courses as relevant.
  - j. An "attestation of worthiness" in "learning and character" and satisfactory completion of postings. This shall be signed by the appropriate heads of departments for the subject being examined, based on evidence from the portfolio of continuous assessment as stated above (with particular consideration given to the letter attesting satisfactory conduct from all tutorial masters) and any other relevant information
  - k. Candidates shall be required to score a minimum of 50 percent in continuous assessment to qualify to sit for the examination for which the marks apply.

**RESIT EXAMINATIONS, EXAMINERS MEETINGS**

- a. Resit examinations shall take place after candidates have attended no fewer than eight weeks of additional instruction for any or all subject(s) failed for the Parts I-IV BDS degree examinations, and no fewer than 12 weeks for the parts V and VI BDS degree examinations.
  
- b. Students repeating a year after failing a resit examination must present themselves for remediation in the relevant subjects during the entire repeating year, prior to sitting for the repeat examination.



- c. The normal rules of continuous assessment shall apply to the additional postings done to enable the candidates to qualify to participate in resit and repeat examinations.
- d. Except as specified in regulations, candidates shall be allowed a maximum of three attempts in any of the parts of the BDS degree examinations, resit examinations inclusive.
- e. Candidates shall be allowed a maximum 18 semesters (inclusive of the 100-level examinations) to complete the BDS courses.
- f. Candidates who fail any subject in the resit examination of the parts III-V BDS degree examinations shall be required to retake the 400-level integrated core lectures prior to sitting for the repeat examinations.
- g. A candidate who – by reason of illness or some other causes acceptable to the university – has been prevented from completing any part of the examination may apply to be credited with his performance in any subjects of the examination in which he/she has satisfied the examiners, provided that he/she submits an application for this purpose to the secretary not later than two weeks after the termination of the relevant examination.
- h. Candidates who – for no acceptable reason – absent themselves from an examination shall be deemed to have failed the examination.
- i. Candidates who fail to qualify to sit for any of the parts of the BDS final examinations shall be deemed to have failed the examination.
- j. Candidates who – for reasons acceptable to the university – have been unable to sit an examination, may enter the examination at the next available occasion
- k. Department examiners' meetings shall normally be held on the last day of the department's examination, while faculty examiners' meetings shall normally be held the day after the last relevant examination. The list of successful candidates for the degree shall be published no more than 24 hours after the faculty examiners' meeting, with the names arranged alphabetically, including those who pass with distinction in any subject.
- l. Candidates who have attended approved courses in other institutions may – on the recommendation of Academic Board – be exempted by the Senate from part or parts of the course or courses leading to the BDS degree, but not from any part of the examination.
- m. All regulations governing the conduct of examinations in the university apply to these examinations.

n. Any of these regulations may, from time to time, be altered by the Senate on the recommendation of the Academic Board.

### **GRADUATION REQUIREMENTS**

To satisfy the requirements for graduation, a student must have taken and passed all the prescribed courses. 50% score shall be taken as minimum to obtain a pass score. In addition to the above, the student must pass all clinical and practical parts of the examinations and any compulsory General Studies Courses.

### **GRADING AND CLASSIFICATION SYSTEM**

Grading of courses shall be done by a combination of percentage marks and group grading into:

Distinction: -	70% and above score.
Credit: -	60% to 69% score.
Pass: -	50% to 59% score.
Fail: -	less than 50%

### **FINAL GRADING: -**

The degree of Bachelor of Dental Surgery (BDS) of the University may be awarded with Honors or as a Pass degree.

### **BDS DEGREE WITH HONORS: -**

The Honors shall be given after the completion of the final (600 level) examination to a candidate who has passed at the first attempt all the examinations and has scored a minimum of four distinctions including at least one distinction in a clinical dental subject.

## **Academic Atmosphere**

Academic seminars are conducted regularly, and these are open to both staff and students. In addition to lectures, clinical teaching, practicals and tutorials are conducted regularly. The Faculty has also established a Quality Assurance Committee to ensure academic benchmarks and standards are maintained. A mentoring system (Mentor-Mentee) was introduced 5 years ago and is being strengthened; it entails few students (3) attached to an academic mentor who oversees their academic progress and wellbeing.

This is in addition to their recourse to level coordinator and sub-deans who are available to facilitate academic activities. Student handbooks are provided for guidance. A Medical Illustrations Unit also facilitates tutoring and research. Students are also represented at Faculty retreats where they are free to itemize issues that may affect them and their academic environment.

Our students are encouraged to imbibe self-learning and aim to improve themselves academically.

### **TRAINING CURRICULUM/ACADEMIC CONTENT: Existing Curriculum for the Programme/ Sub-Discipline/Discipline**

Attach to this Form, the complete and current prospectus which should include:

- (a) Program Title: **Bachelor of Dental Surgery (BDS)**
- (b) Program/Sub-Discipline/Discipline Philosophy and objectives:

The Faculty's vision is to be a world-class oral health training institution committed to the promotion of oral health through the excellence of its learning, service and research.

The mission of the faculty is to produce oral health graduates who will be proficient, independent, humane, research-focused, problem-solving, business-oriented and able to cope with challenges of the community with international standards in skills critical to oral health care.

Our curriculum is an integrated, system-based, person-centered, community-oriented, competency-driven model meant to provide our students with the best learning opportunities possible.

**OBJECTIVES AND LEARNING OUTCOMES**

**OBJECTIVE – 1**

To produce graduates who will be competent, confident, compassionate, problem solving, research-oriented and entrepreneurial dentists, able to respond to the oral health needs of their community now and in the future

<b>EXPECTED OUTCOMES</b>	<b>LEARNING EXPERIENCE</b>	<b>ASSESSMENT METHODS</b>
Competent in wide range of skills, including investigative, analytical, problem-solving, planning, communication, and presentation Demonstrate a contemporary knowledge & understanding of the broader issues of oral health care	Didactic lectures Showing examples to students during clinic and ward rounds Workshops or seminars involving groups sharing experiences, teachers and educators serve as role models	Logbooks Assessment of students conduct and behavior by SRs and Consultants

## OBJECTIVE – 2

To produce oral physicians rather than oral surgeons whose learning will be more towards disease prevention than treatment

EXPECTED OUTCOMES	LEARNING EXPERIENCE	ASSESSMENT METHODS
<p>Be community oriented see community as his “patient” rather than individual pts. Apply the broad perspective of dental public health concepts in the prevention of oral diseases.</p> <p>Treat patients without discrimination, regardless of gender, status, age, religion, beliefs, and culture understand the effect of religion and culture on health and disease</p>	<p>Didactic lectures</p> <p>Field trips</p> <p>Workshops and seminars</p> <p>Showing examples to students during community visits and town/village meetings</p> <p>Teachers and educators serve as role models</p>	<p>Grading logbooks grading during seminar presentations</p> <p>SAQS (Self-Assessment Questions)</p> <p>Viva voce</p>

## OBJECTIVE – 3

To enhance educational and professional collaboration between dentistry and other health professions, featuring more emphasis on the interaction of dental and medical problems.

EXPECTED OUTCOMES	LEARNING EXPERIENCE	ASSESSMENT METHODS
<p>Have the ability to effectively pass correct information to other members</p> <p>Write good case history, referral letters and reports</p> <p>Good listener &amp; give appropriate feedback, IT tool presentations</p>	<p>Didactic lectures</p> <p>Seminars</p> <p>Case presentations</p> <p>Ward rounds</p>	<p>Written papers</p> <p>Grading during seminars and case presentations</p> <p>SAQs (Self-Assessment Questions)</p> <p>VIVA VOCE</p> <p>MCQs</p>

#### **OBJECTIVE – 4**

To revitalize the science underlying clinical decision-making via evidence-based approaches, making assessment and learning competency-based.

<b>EXPECTED OUTCOMES</b>	<b>LEARNING EXPERIENCE</b>	<b>ASSESSMENT METHODS</b>
Show broad academic knowledge in the art and science of dentistry. Understand the foundation of diseases of oral and dental tissues. Understand that management of patients be evidence-based not speculative	Didactic lectures Chair-side teaching Ward rounds Small-group teaching Seminars and workshops tutorials	Formative and summative examinations in the form of MCQs, SAQs, OSCE, practical and clinical examinations and viva voce

#### **OBJECTIVE – 5**

To produce world-class graduates whose competences enable them to function at the highest levels of academic, hospital or community settings; not only in Nigeria but also worldwide

<b>EXPECTED OUTCOMES</b>	<b>LEARNING EXPERIENCE</b>	<b>ASSESSMENT METHODS</b>
Broad academic and professional competence in all areas of dentistry. Function as group with competences in all procedures comparable to local or foreign graduates all over the world Show competence and confidence interacting with patients and their relatives	Didactic lectures Chair-side teaching Ward rounds Small-group teaching seminars & workshops Tutorials	Formative & summative exams in the form of MCQs, SAQs, OSCE, practical and clinical examinations and viva voce

<p>Manage patients and their relations with due respect, empathy and recognition  Able to obtain informed consent and to adequately communicate adverse occurrences (such as death) to patients relations  Develop and manage a general dental practice or clinic effectively, being an effective team leader and employer with very good communicative skills</p>		
--	--	--

**OBJECTIVE – 6**

To engender self-directed learning in dental students and thus prepare them for the life-long learning that is essential for keeping up with the constant changes in dental practice.

<b>EXPECTED OUTCOMES</b>	<b>LEARNING EXPERIENCE</b>	<b>ASSESSMENT METHOD</b>
<p>Fully understand the continuous changes in the practice of dentistry.  Keep up with new developments in the discipline through on-going self-directed learning  Understand the importance of life-long learning for him/herself, for the patient, and for the society as a whole  Appreciate continuing professional development as a support for the concept of life-long learning</p>	<p>Didactic lectures introduce students to scientific journals to stimulate their interest to look for new information at every level of the dental programme. Seminars and tutorials</p>	<p>Involvement in seminars and tutorials to be monitored with records kept and marks allocated.  Seminar presentations on ways of overcoming problems of learning.  Short term paper on literature review on given topics</p>



## **Admission Requirements:**

Candidates for admission into Bayero University, Kano must satisfy the general admission requirements of the University, as well as the special entry requirements for the Faculty and programme into which admission is sought. In addition, all candidates for admission into Bayero University, Kano, must be at least sixteen (16) years old

### **Level I (UTME) Admissions**

The following are the general entry requirements for admission into first degree programmes through the Unified Tertiary Matriculation Examination (UTME).

1. An applicant must write the UTME (conducted nationally by the Joint Admission and Matriculation Board, JAMB) and obtain an acceptable score for the programme applied for, as may be set by Senate from time to time.
2. An applicant may also be required to sit for Post-UTME screening examinations conducted by the University and obtain an acceptable score for the programme applied for, as may be set by Senate from time to time.
3. In addition to obtaining acceptable scores in UTME and Post-UTME, a candidate must also hold at least one of the following qualifications, with credit passes in English Language English, Mathematics, Biology, Chemistry, Physics obtained in not more than two sittings:
  - i. Senior School Certificate (SSC) from the West African Examinations Council (WAEC) or the National Examinations Council (NECO)
  - ii. General Certificate of Education Ordinary Level (GCE O/Level)
  - iii. Any other qualification deemed equivalent to any of the above by Senate.

### **Level II (Direct Entry) Admissions**

The following are the general entry requirements for admission into first degree programmes through the Direct Entry (DE).

- (a) An applicant must apply through the Joint Admission and Matriculation Board, (JAMB).
- (b) Candidates for admission into some programmes may also be required to sit for and pass a screening examination.
- (c) A candidate must hold at least one of the qualifications listed in 2.1 (c), with a minimum of five credit passes obtained in not more than two sittings.

- (d) In addition, a candidate must also hold at least one of the following qualifications, with credit passes in Biology, Chemistry and Physics obtained from an institution recognized to run them:
- i. General Certificate of Education Advanced Level (GCE A/Level) with credit passes in at least two subjects. The Interim Joint Matriculation Board (IJMB) Certificate with a minimum score of 13.
  - ii. these by First degree of at least second class lower division in the medical, para-medical, biological, chemical, or physical sciences provided such candidates also had credit passes in Physics, Chemistry, Biology, Mathematics and English language at the SSCE, WASC, GCE 'O' level, NECO or its equivalent.
  - iii. Any other qualification deemed equivalent to Senate.

### **Inter-University Transfer**

In exceptional cases, candidates may be considered for transfer from other universities into Bayero University to continue their degree studies. The following guidelines shall be adopted in processing applications for inter-university transfers:

- (a) Application forms for transfer into the University shall be obtained from the Registry on the payment of prescribed fees.
- (b) Candidates seeking transfer shall possess the minimum entry requirements into Bayero University (as indicated in 2. 1 and 2.2 above) prior to their admission into the university from where they are seeking the transfer.
- (c) Applicants seeking the transfer must be currently enrolled in the university from where they are seeking the transfer.
- (d) The applicants must be in good academic standing in their current university.
- (e) The programme the applicant seeks to transfer into must be similar to the one (s)he is pursuing at the current university.
- (f) There must be valid reasons for the transfer (with appropriate supporting documents), which clearly make a case for studying at Bayero University, rather than continuing in the current university.
- (g) There shall be no transfer to the first, or final, year of study of any programme.
- (h) All inter-university transfer cases require Senate's approval.
- (i) If the transfer is approved, the subjects/credits passed in the previous university shall be transferred to the programme at Bayero University, Kano. Similarly, the number of years spent in the previous university counts in determining the student's period of stay at Bayero University.

### ***Prohibition of Admission/Transfer Deferment***

A student admitted/transferred into the University in a particular academic year cannot defer the admission/transfer to another year.

### ***Prohibition of Change of Name***

A student shall only use the name with which (s)he is admitted/transferred into the University and which appears on the qualifications used to secure the admission/transfer. This name shall be used in all certificates to be issued by the University.

### ***Nomenclature***

The programme shall offer courses leading to the award of the Bachelor of Dental Surgery (BDS) degree. In compliance with the requirement of the Medical and Dental Council of Nigeria (MDCN) and National Universities Commission (NUC), the BDS degree shall be unclassified.

### ***Duration of the Programme***

Students shall spend a minimum of 6 academic sessions for those admitted to 100 level and 5 academic sessions for those admitted to 200 level and a maximum of 11 and 10 academic session respectively, in the programme.

### **Program/Sub-discipline/Discipline Structure to include period of formal studies in the Universities Industrial training planned visit and projects:**

<b>BASIC MEDICAL SCIENCES 1<sup>ST</sup> AND 2<sup>ND</sup> SEMESTER.</b>									
<b>200 LEVEL</b>	ANATOMY PHYSIOLOGY BIOCHEMISTRY <b>20 WEEKS</b>	<b>BREAK 2 WEEKS</b>	ANATOMY PHYSIOLOGY BIOCHEMISTRY <b>20 WEEKS</b>	<b>1<sup>ST</sup> PROFESSIONAL EXAMINATION 2 WEEKS</b>	RESIT REVISION <b>4 WEEKS</b>	RESIT EXAMS <b>2 WEEKS</b>	<b>TOTAL 52 WEEKS</b>		
<b>300 LEVEL</b>	ANATOMY PHYSIOLOGY BIOCHEMISTRY <b>20 WEEKS</b>	<b>2<sup>ND</sup> PROFESSIONAL EXAMINATION 2 WEEKS</b>	RESIT REVISION <b>4 WEEKS</b>	RESIT EXAMS <b>2 WEEKS</b>	CBME <b>11 WEEKS</b>	PATHOLO GY I PHARM I <b>13 WEEKS</b>	<b>TOTAL 52 WEEKS</b>		
<b>CLINICAL SCIENCES ROTATIONS 1<sup>ST</sup> AND 2<sup>ND</sup> SEMESTER.</b>									
<b>400 LEVEL</b>	COMMUNITY MEDICINE POSTING <b>9 WEEKS</b>	PATHOLOGY I PHARM I POSTING <b>11 WEEKS</b>	MED I SURG I <b>14 WEEKS</b>	PATHOLOGY II PHARM II POSTING <b>4 WEEKS</b>	<b>3<sup>RD</sup> PROFESSIONAL EXAMINATION 2 WEEKS</b>	MED II SURG II <b>14 WEEKS</b>	PATHOLOG Y III PHARM III REVISION <b>2 WEEKS</b>	<b>3<sup>RD</sup> PROFESSIONAL EXAMINATION 2 WEEKS</b>	RESIT REVISION AND EXAM <b>4 WEEKS</b>
<b>DENTISTRY 1<sup>ST</sup> AND 2<sup>ND</sup> SEMESTER.</b>									
<b>500 LEVEL</b>	PREPHASE POSTING AND EXAMS <b>25 WEEKS</b>	ORTHODONTICS <b>7 WEEKS</b>	PAEDIATRIC DENTISTRY <b>7 WEEKS</b>	ORAL PATHOLOGY <b>7 WEEKS</b>	ORAL RADIOLOGY <b>7 WEEKS</b>	ORAL MEDICINE <b>7 WEEKS</b>	REVISION <b>2 WEEKS</b>	<b>1<sup>ST</sup> BDS PROFESSIONAL EXAMINATION 2 WEEKS</b>	RESIT REVISION AND EXAMS <b>8 WEEKS</b>

<b>600 LEVEL</b>	CONSERVATIVE DENTISTRY <b>7 WEEKS</b>	PROSTHETIC DENTISTRY <b>7 WEEKS</b>	ORAL AND MAXILLOFACIAL SURGERY <b>7 WEEKS</b>	PERIODONTOLOGY <b>7 WEEKS</b>	DENTAL PUBLIC HEALTH <b>7 WEEKS</b>	DENTAL PRACTICE MANAGEMENT <b>7 WEEKS</b>	<b>2<sup>ND</sup> BDS PROFESSIONAL EXAMINATION</b> <b>2 WEEKS</b>	RESIT REVISION <b>6 WEEKS</b>	RESIT EXAM <b>2 WEEKS</b>
------------------	--	--	--	----------------------------------	--	--	--	----------------------------------	------------------------------

**Course content specifications/syllabus of all courses in the Programme/Sub-Discipline/Discipline:**

**FACULTY OF DENTISTRY – COURSE OBJECTIVES**

**400 LEVEL**

**SUBJECT: LOCAL ANESTHESIA IN DENTISTRY AND CLERKSHIP**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (40% contact time)	COMPREHENSION (20% contact time)	APPLICATION (40% contact time)
Provide basic skills that will be required throughout the training, and in Dental practice. Provide basic clinical skills that will be required throughout the training, and in Dental practice.	Possesses basic hand-eye coordination responsible for Dentistry. Possesses commonly used skills and can perform commonly-used procedures in Dentistry e.g. mandibular blocks and clerking	Knows different equipment and instruments used in achieving local anaesthesia. Knows the components, types, materials used and complications in Local Anaesthesia in Dentistry.	Can identify complications of Local anaesthesia	Can Perform different local anaesthetic procedures (blocks and infiltration)
Understand the roles, expectations and importance of a Dentist. Provide an ethical foundation for a life as dental professionals. Provide a foundation for pre-clinical and clinical training in Dentistry.	Can describe the expectations, roles, specialties and history of Dentistry. Can clerk a patient and provide basic differential diagnosis. Understands the nuances of clerkings in the different dental specialties.	Know the specialties in Dentistry Know the ethical principles underpinning dentistry Knows different equipment and instruments in the dental operator and laboratory.	Can mention nuances in the different clerkings employed in different specialties of Dentistry Can recognize and utilize various and current tooth notations in Dentistry	Can clerk the dental patient

Provide basic pre-clinical and clinical skills that will be required throughout the training, and in Dental practice.		Knows different manpower types in Dentistry.		
---	--	--	--	--

**COURSE CONTENT**

<b>COURSE</b>	<b>COURSE CONTENT</b>	<b>LIST OF TOPICS</b>	<b>COURSE OUTCOMES</b>
Local Anaesthesia in Dentistry	Introduction to Local Anaesthesia – History, theories, management of pain, and applied surgical anatomy LA – Advantages, disadvantages, and the armamentarium The Local Anaesthetic – classification, mechanism of action and properties Complications of LA	<ol style="list-style-type: none"> <li>1. Introduction – History of anaesthesia, theories, management of pain etc.</li> <li>2. Applied surgical anatomy.</li> <li>3. Local Anaesthesia – Advantages, disadvantages, and armamentarium.</li> <li>4. The Local Anaesthetic – classification, mechanism of action and ideal properties</li> <li>5. Local Anaesthetic techniques – Pre-medication, and local and regional techniques.</li> <li>6. Complications of LA</li> </ol>	<p>Be able to discuss the historical, anatomical and physiological aspects of Local Anaesthesia in Dentistry.</p> <p>Be able to identify and utilize the various armamentaria used in achieving Local Anaesthesia.</p> <p>Be able to describe the various techniques for anesthetizing oral tissues.</p> <p>Be able to describe the complications of LA and their mechanism.</p>

Local Anaesthesia in Dentistry Practical	Local Anaesthetics techniques – local and regional	<ol style="list-style-type: none"> <li>1. Clinical demonstration of cartridge loading and handling of the dental syringe;</li> <li>2. Chair, patient and clinician positioning during local anaesthesia administration; and</li> <li>3. Testing effectiveness of LA infiltration</li> </ol>	Be able to achieve Local Anaesthesia in upper and lower teeth.
The Profession of Dentistry (1 week, Taught & Practicals)	<p>History and state of Dentistry in Nigeria and the relevance of Dentistry to Health in Nigeria.</p> <p>Different practice options in Dentistry – Private, Government and Group practices</p> <p>Different specialties in Dentistry</p> <p>Exposure to different dental operatories – types, equipment, rationale and staffing.</p> <p>Handling, manipulation, and use of different equipment, instruments and materials commonly used in Dentistry.</p>	<ol style="list-style-type: none"> <li>1. History of Dentistry &amp; State of Dentistry in Nigeria</li> <li>2. Ethical principles of Dentistry</li> <li>3. The Future of a Dentist</li> <li>4. Tooth notations in Dentistry</li> <li>5. Common terms in Dentistry</li> <li>6. Introduction to the dental operator and the dental laboratories.</li> <li>7. Manpower types in Dentistry.</li> <li>8. Instruments and materials in Dentistry, and their use <ul style="list-style-type: none"> <li>• Handling</li> <li>• Set-up of trays</li> <li>• Sterilization</li> </ul> </li> </ol>	<p>Be familiar with the nuances and commonly used terms in Dentistry.</p> <p>Be familiar with the roles and expectations of a Dentist, including clinical, academic and ethical.</p> <p>Be familiar with commonly used equipment, instruments and some procedures in which they are used.</p>
Clerkship in Dentistry (2 Weeks, Taught & Practicals)	<p>Understand principles of Clerkship and the deductive process by which diagnoses are made.</p> <p>Progress sequentially</p>	<ol style="list-style-type: none"> <li>1. Principles of history taking.</li> <li>2. The Presenting Complaint and its History</li> </ol>	<p>Reinforce principles of clerkship from previous years and introduce student to the peculiarities of clerkship in</p>

	<p>through the process of reaching a diagnosis, with the rationale and options included.</p>	<p>3. Past History relevant to the presenting complaint</p> <p>4. Making differential Diagnosis</p> <p>5. Common Investigations in Dentistry</p> <p>6. The Definitive Diagnosis and the Treatment Plan</p> <p>7. Nuances in different specialties</p> <ul style="list-style-type: none"> <li>• Orthodontics</li> <li>• Paediatric Dentistry</li> <li>• Oral &amp; Maxillofacial Surgery</li> <li>• Periodontology</li> <li>• Restorative Dentistry</li> </ul> <p>Prognostication in Dentistry</p>	<p>Dentistry.</p> <p>Foster logical and deductive approach to approaching oral complaints.</p>
--	--	---	--



**SUBJECT – OPERATIVE TECHNIQUES**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (25% contact time)	COMPREHENSION (25% contact time)	APPLICATION (50% contact time)
To provide a comprehensive overview of the contribution of materials to the lost structure and properties.	<p>The student should be able to do the following after the course</p> <ol style="list-style-type: none"> <li>1. Have an understanding of the various causes of tooth substance loss and the conditions that make it possible for such structural losses to be replaced by artificial materials</li> <li>2. Understand the need for and methods of classifying such tooth structure loss</li> <li>3. Understand the current concepts of the surgical management of caries</li> <li>4. Become aware of the ongoing policy of amalgam phase down nationally and the need to make it part of their professional mentality</li> <li>5. Understand the link between their study of material science and the operative procedures they will be undertaking</li> <li>6. Understand the techniques and methods of performing simple intra-coronal tooth restorations</li> </ol>	<p>The student should be familiar with the knowledge base of all topics listed under the courses within the subject.</p>	<p>The student should comprehend and have translatory knowledge of at least the following</p> <ol style="list-style-type: none"> <li>1. Caries and non carious causes of tooth substance loss</li> <li>2. The classification of carious lesions</li> <li>3. Integration of properties of restorative materials with operative dental procedures</li> <li>4. The need for and methods of moisture control in operative dentistry</li> <li>5. The techniques and methods of operative dental procedures</li> </ol>	<p>The student should be able to</p> <ol style="list-style-type: none"> <li>1. Identify the cuspal anatomy of the posterior teeth and let this guide their cavity preparation</li> <li>2. Be able to identify the burs used in cavity preparation and know the use of each</li> <li>3. Be capable of working with indirect vision</li> <li>4. Carry out amalgam and composite restorations</li> </ol>

## COURSES CONTAINED

Course	Course content	List of topics	Course outcomes
Operative Techniques	<p>Introduction to, and familiarization with materials, basic procedures and concepts in conservative dentistry</p> <p>Principles of tooth preparation and minimum intervention dentistry, including Fundamentals of tooth preparation, pulp protection, enamel and dentin adhesion</p> <p>Designing cavities for various restorations</p> <p>Materials and techniques in restorative dentistry; Contrast between Amalgam and Composite; Amalgam phase-down.</p>	<ol style="list-style-type: none"> <li>1. Principles of cavity preparation</li> <li>2. Moisture control</li> <li>3. Restoration of the cavity with missing walls, and complex cavities</li> <li>4. Retentive aids for plastic restorations</li> <li>5. Amalgam restorations</li> <li>6. Composite restorations</li> <li>7. Intra-coronal Cast metal restorations</li> </ol>	<p>Be able to discuss the different causes of tooth loss and their restorations.</p> <p>Be able to discuss the properties and manipulation of materials vis a vis the lost structure.</p>
Operative Technique Practicals	<ul style="list-style-type: none"> <li>● Preparation of cavities in soap and plaster models</li> <li>● Application of rubber dam</li> <li>● Preparation of occlusal cavities (Class I)</li> <li>● Preparation of cervical cavities (Class V)</li> <li>● Preparation of proximal cavities (Class II and III)</li> <li>● Preparation of Incisal cavities (Class IV)</li> <li>● Restoration with Amalgam and Composite.</li> </ul>		

**SUBJECT – PROSTHETIC TECHNIQUES (PRT)**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (25% contact time)	COMPREHENSION (25% contact time)	APPLICATION (50% contact time)
An introduction to the dynamics, function and structure of various prostheses used in the mouth. Knowledge of techniques employed in the fabrication of prostheses.	<ol style="list-style-type: none"> <li>1. Use knowledge from the study of material science in the manipulation of materials for making prosthesis</li> <li>2. Understand retention stability and support in complete dentures</li> <li>3. Develop objective means of judging aesthetics in complete dentures</li> <li>4. Understand and perform all laboratory steps involved in complete denture fabrication</li> </ol>	<p>Principles and techniques of impression making for complete dentures</p> <p>The rationale and methods of clinical steps in complete denture prescription</p> <p>The rationale and methods of all laboratory steps in complete denture prescription</p>	<p>Comprehend and have translatable knowledge of at least the following</p> <ol style="list-style-type: none"> <li>1. Impression making for complete dentures</li> <li>2. All clinical steps in complete denture prescription</li> <li>3. All laboratory steps in complete denture prescription</li> </ol>	<p>Be able to</p> <p>Outline all the steps involved in complete denture fabrication from patient assessment to delivery</p> <p>Understand and correct errors that may arise during the denture fabrication process</p> <p>Perform all laboratory steps involved in complete denture prescription</p>

**COURSES CONTAINED**

Course	Course content	List of topics	Course outcomes
Prosthetic Techniques	<ol style="list-style-type: none"> <li>1. Retention, stability and support, aesthetics and preservation of residual structure</li> <li>2. Parts and surfaces and how its form achieves</li> </ol>	<ol style="list-style-type: none"> <li>1. The scope of prosthetic dentistry and introduction to the dental laboratory</li> <li>2. Goals of Complete denture fabrication</li> <li>3. The Complete denture</li> <li>4. Concept of occlusion in Complete Dentures.</li> <li>5. Impressions</li> <li>6. Record blocks and their significance.</li> </ol>	<p>Understanding the laboratory steps involved in full denture construction</p> <p>Be able to discuss the principles of support, retention, stability, aesthetics and preservation of healthy tissue</p>

	<p>the goals of fabrication.</p> <p>3. bite registration</p>	<p>7. Face-bows, articulators, and transfer of records to articulators</p> <p>8. Setting teeth and the trial appointment</p> <p>9. Denture processing</p>	
Prosthetic Techniques practicals	<p>Bite-block fabrication and manipulation of gypsum.</p> <p>Arbitrary mounting of bite blocks on articulators.</p> <p>Setting teeth to bilateral balanced occlusion.</p> <p>Fabrication of the wax trial denture.</p>	<p>Appreciation of the work of the technologist by learning to do same</p> <p>Gain an appreciation of how theoretical principles are translated to practical appliances</p> <p>Prepare the student to be able to make quality assurance checks on jobs from the laboratory during his/her practice.</p>	

**SUBJECT – SCIENCE OF DENTAL MATERIALS (SDM)**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (25% contact time)	COMPREHENSION (25% contact time)	APPLICATION (50% contact time)
<p>To provide a theoretical basis for rational use of materials in Dental practice.</p> <p>To provide a transition from knowledge of basic sciences to</p>	<p>Be able to:</p> <p>Relate knowledge learnt in the physical sciences with the properties of materials used in restorative dentistry</p> <p>Understand the ideal properties and requirements of dental materials</p>	<p>Be familiar with the knowledge base of all topics listed under the courses within the subject.</p>	<p>Comprehend and have translatable knowledge of:</p> <ol style="list-style-type: none"> <li>1. The measurement of properties of dental materials</li> <li>2. The applications of commonly used materials</li> </ol>	<p>Be able to:</p> <ol style="list-style-type: none"> <li>1. Choose dental materials for particular applications based on their properties</li> <li>2. Practically test</li> </ol>

properties of dental materials. To provide an understanding of the different classes of materials used in Dentistry.	Understand the concept of biocompatibility and have an understanding of the quality checks a product undergoes before being licensed for dental use Understand the properties and peculiarities of the commonly used restorative dental materials		in dentistry 3. The science of polymers and their varied uses in dentistry 4. Ceramics in dentistry 5. The amalgamation process 6. Health hazards associated with dental materials and their prevention	physical properties of dental materials 3. Manipulate common dental materials appropriately
---	--	--	---	--

### COURSES CONTAINED

Code	Course	Course content	List of topics	Course outcomes
	Science of dental materials	Identification and description of frequently used materials in dentistry.  Physical, biologic and chemical characteristics of materials in dentistry, including their manipulation.	<ol style="list-style-type: none"> <li>1. Introduction to dental materials: basic requirements and general properties</li> <li>2. Properties of dental materials</li> <li>3. Gypsum Products</li> <li>4. Dental Waxes</li> <li>5. Dental Impression Materials</li> <li>6. Polymers and polymerization</li> <li>7. Metals used in Dentistry</li> <li>8. Casting and investment procedures</li> <li>9. Denture base materials</li> <li>10. Elastomeric impression materials</li> <li>11. Dental cements</li> <li>12. Cavity liners, bases and varnishes</li> <li>13. Dental Amalgam</li> </ol>	<p>Be able to identify and distinguish between frequently used materials in Dentistry.</p> <p>To have a basic grasp of the properties that influences the selection of materials.</p> <p>Be able to classify dental materials by application and/or chemistry.</p>

			14. Bonding 15. Tooth-colored filling materials 16. Root Canal Sealants 17. Ceramics	
	Science of dental materials practicals	Measurements of physical properties of dental materials in the dental laboratory Identification and manipulation of common materials in dentistry, including cements, impression materials etc.	Physical and chemical tests of materials e.g. Knoop's hardness test Manipulation of materials used in Dentistry e.g. mixing of cements, mixing impression materials etc.	

**SUBJECT – ORAL BIOLOGY (ORB)**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (60% contact time)	COMPREHENSION (30% contact time)	APPLICATION (10% contact time)
Describe the embryogenesis and odontogenesis. Explain the formation and structure of dental mineralized tissues Understand and describe the role of hormones on oral tissues Introduction to saliva, its functions and the structure of salivary glands Explain and describe stages in mastication	Can list and describe the stages in odontogenesis, the vestiges of odontogenesis and its clinical implication. Can discuss the role of hormones in the function of oral tissues and their altered secretion in its metabolism Can discuss the components and functions of saliva and the classification of salivary glands Can describe soft tissue control of mastication and the stages of mastication and deglutition Can describe the mechanism of	Knowledge of the stages in amelogenesis and odontogenesis Knowledge of the various components of saliva and the microanatomy of salivary glands Knowledge of the various steps in mastication and deglutition and disorders in Knowledge of the various tooth deposits , their formation and their pathophysiology in	Illustrate odontogenesis and outline disorders in each stage with possible clinical implications Explain the physiology of saliva secretion from its glands and salivary gland disorders Explain formation of each tooth deposit and describe calcium metabolism	Identification of enamel organ and different stages of odontogenesis Perform sialometry Identification and differentiation between different tooth deposits

and deglutition and their effects on digestion. Describe the components of tooth deposits and the effects of their accumulation on oral tissues	formation of all tooth deposits	causation of caries and periodontitis managed.		
---	---------------------------------	--	--	--

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (60% contact time)	COMPREHENSION (30% contact time)	APPLICATION (10% contact time)
<p>Understanding of the development of the teeth, dentitions, and the craniofacial complex</p> <p>Knowledge of the morphology, occlusion, esthetics, phonetics, and functions of these teeth.</p> <p>Understanding of the development of occlusion for both dentitions</p> <p>The application of dental anatomy to clinical practice</p>	<p>Can describe the nomenclature and numbering systems of teeth, the types of dentition, and the specific chronologies of both the primary and permanent human dentitions</p> <p>Can describe in details, each primary and permanent tooth, and discuss the major differences between primary and permanent teeth.</p> <p>Can describe the details of pulp chambers and canals and detailed neurovascular supply to the tooth and jaws</p> <p>Can describe the necessary anatomical and functional basis for temporomandibular system and mastication.</p>	<p>Knowledge of types of dentition and chronologies in eruption</p> <p>Knowledge of the tooth morphology, esthetics and function of individual teeth</p> <p>Knowledge dento-osseous structures and pulp canal system</p> <p>Knowledge of the basics of occlusion</p>	<p>Describe the peculiar morphological features of individual teeth</p> <p>Identify specific landmarks and contact areas on teeth</p>	<p>Identify individual teeth from each jaw and side</p> <p>Compare and contrast teeth with similar features</p> <p>Identify and contrast primary and permanent teeth</p>

	<p>Can discuss the etio-pathogenesis, histopathological features and management of non-odontogenic tumours and benign bone pathologies</p> <p>Can describe the etiology, pathology and sequelae of pulpal, periapical and periodontal diseases</p> <p>Can describe orofacial syndromes and discuss specific diseases of the lips and tongue</p>			
--	---	--	--	--

### COURSES CONTAINED

CODE	COURSE	COURSE CONTENT	LIST OF TOPICS	COURSE OUTCOMES
	<b>Oral Histology &amp; Embryology</b>	<p>Formation and mineralization of dental tissues including embryogenesis of the face; stages of tooth development from the dental lamina.</p> <p>Describe and understand the tooth model hypotheses and amelogenesis and its stages with functions of ameloblasts</p> <p>Describe and understand stages of dentinogenesis and the types of dentine, as well as cementogenesis and the formation of the periodontium</p>	<ol style="list-style-type: none"> <li>1. Introduction to odontogenesis</li> <li>2. Amelogenesis,</li> <li>3. Dentinogenesis &amp; Cementogenesis</li> <li>4. Formation of periodontium</li> <li>5. Developmental abnormalities</li> </ol>	<p>Knowledge of all stages involved in the formation of the tooth</p> <p>Knowledge of the clinical implication of the stages in the function of the tooth</p> <p>Knowledge of the clinical implications of defects encountered in the stages of development</p>
	<b>Oral Physiology</b>	<p>Effects of age on mineralized dental tissues</p> <p>Effect of hormones on oral structures</p> <p>Be able to define hormones, classify and outline steps in their secretion; Be able to outline their regulation, effects and therapeutic uses; Be able</p>	<ol style="list-style-type: none"> <li>1. Effect of hormones on oral structures</li> </ol>	<p>Understanding the mechanism of action of hormones</p> <p>Describe how reduced or increased expression can affect dental tissues</p>



	<p>to describe the effects of hypo-secretion and hyper-secretion of i) thyroid hormone ii) growth hormone iii) Parathyroid hormone; Be able to describe the effect of sex hormones at different stages of puberty, pregnancy and menopause</p> <p>Saliva and salivary glands; Be able to list the components of saliva; Be able to enumerate the functions of saliva; Be able to classify salivary glands; Be able to describe structure and development of saliva; Be able to describe the clinical and applied anatomy of saliva and salivary glands</p> <p>Mastication, deglutition and taste; Be able to define mastication and describe the functions of temporomandibular joint and muscles of mastication; Be able to describe the roles of tongue, cheek and lips as aids to mastication; Be able to describe the 3 hypothesis for reflex control of mastication; Be able to describe masticatory efficiency and masticatory disorders; Be able to describe all the stages of deglutition Be able to describe the principles and basics of taste sensation</p> <p>Tooth Deposits and Calcium metabolism; Definition of pellicle, types of pellicle and formation of pellicle; Definition of plaque, composition of plaque; Be able to differentiate the types of plaque and enumerate factors that favour plaque formation; Be able to outline the clinical implication of plaque accumulation on tooth and the gingivae; Be able to understand the theories on mechanism of calculus formation; Outline and contrast types of calculus Be able to understand calcium metabolism</p>	<ol style="list-style-type: none"> <li>2. Saliva, its functions, and salivary glands</li> <li>3. Organic and inorganic constituents of saliva</li> <li>4. Mastication and deglutition</li> <li>5. Taste and its stimuli</li> <li>6. Tooth deposits <ol style="list-style-type: none"> <li>a. Pellicle</li> <li>b. Plaque</li> <li>c. Calculus</li> </ol> </li> <li>7. Calcium and phosphorus metabolism</li> </ol>	<p>Understanding how expression of these hormones can affect pathological changes in oral tissues</p> <p>Understanding the therapeutic uses of each hormone</p> <p>Be able to elaborate on saliva and its various functions</p> <p>Be able to outline the components of saliva</p> <p>Knowledge of salivary glands and the physiology of their secretion Knowledge of all stages and components of mastication and deglutition</p> <p>Knowledge of the regulatory pathways for mastication and deglutition</p> <p>Knowledge of the taste pathway</p> <p>Definition and identification of tooth deposits</p> <p>Knowledge of the mechanism of formation of tooth deposits</p> <p>Knowledge of the association between tooth deposits and the pathogenesis of dental caries and periodontitis</p> <p>Adept understanding of calcium metabolism and its influence on bone and dental tissues</p>
--	--	--	---

	<b>Oral Biology Practicals</b>	Pictorial and histologic slide depictions of different stages of tooth development Pictorial and histologic slide depictions of abnormalities of tooth development	Be able to identify important milestones in tooth development such as the enamel organ, etc. in histologic or pictorial depictions. Be able to identify abnormalities in tooth development in histologic or pictorial depictions.

CODE	COURSE	COURSE CONTENT	LIST OF TOPICS	COURSE OUTCOMES
	Dento-facial Anatomy and Tooth Morphology	<p>Light introduction to: The formation of the dentine; formulae for mammalian teeth and different tooth numbering systems</p> <p>Form, function and articulation of teeth, including fundamental curvatures, facial and lingual contours, Proximal, interproximal areas and embrasures, Description of the crown and root; Identification and description of surfaces, ridges and other tooth landmarks; variabilities and malformations in tooth development</p> <p>The chronology of calcification, emergence and sequence of eruption of primary and permanent teeth</p> <p>The life cycle and importance of primary teeth; major differences between primary and deciduous teeth</p> <p>Labial, lingual, mesial and distal aspects of all teeth in the quadrants of the maxilla and mandible</p> <p>The size of the pulp cavity, apical foramen and pulp horns; labio-lingual and mesio-distal sections of the</p>	<ol style="list-style-type: none"> <li>1. The Dentition – Formation, nomenclature, and numbering</li> <li>2. The Dentition – Chronology, development and eruption.</li> <li>3. Dental Anatomical landmarks and Measurement of teeth</li> <li>4. Major contrasts between primary and permanent teeth</li> <li>5. Tooth Morphology <ul style="list-style-type: none"> <li>• maxillary anterior</li> </ul> </li> </ol>	<p>Be able to:</p> <p>Outline the formulae for mammalian teeth</p> <p>Describe Zsigmondy/ palmer and FDI nomenclature system</p> <p>Describe of all surface landmarks on teeth</p> <p>Describe the division of teeth into Thirds; Line Angles, and Point Angles</p> <p>Know eruption sequence of primary and permanent teeth</p> <p>Know the importance of primary teeth</p> <p>Identify and differentiate primary and permanent teeth</p> <p>Describe the peculiar features and landmarks of individual teeth of the primary dentition</p>

		<p>pulp cavities; radiological features of the pulp</p> <p><b>The form and function of the oro-facial complex;</b> Surfaces and processes of the maxilla and mandible; Branches and course of internal maxillary and inferior alveolar arteries; Course of the mandibular and maxillary nerve; <b>Arterial supply to the teeth; Nerve supply to the jaws and teeth</b></p> <p>The Temporomandibular joint – articulation, mastication, mandibular movements; Cusp, Fossa, and Marginal Ridge Relations; Concepts and Neurobehavioral Aspects of Occlusion</p> <p>Be able to describe and understand the anatomy of the TMJ</p> <p>Be able to describe mandibular positions and mandibular movements</p> <p>Be able to outline muscles of mastication and describe their functions</p> <p>Be able to describe an overview of primary molar relationships</p> <p>Be able to explain arch dimensions and tooth size</p> <p>Be able to describe dental arch forms and teeth overlap</p> <p>Be able to describe occlusal contact relations and intercuspal relations of the teeth</p> <p>Be able to describe the guidance of occlusion</p>	<p>primary teeth</p> <ul style="list-style-type: none"> <li>• mandibular anterior primary teeth</li> <li>• maxillary posterior primary teeth</li> <li>• mandibular posterior primary teeth</li> <li>• maxillary anterior permanent teeth</li> <li>• mandibular anterior permanent teeth</li> <li>• maxillary posterior permanent teeth</li> <li>• mandibular posterior permanent teeth</li> </ul> <p>6. Physiological form of teeth and periodontium</p> <p>7. Pulp chambers,</p>	<p>Know the physiological form of the teeth and periodontium</p> <p>Know Contact Areas and Incisal and Occlusal Embrasures from the Labial and Buccal Aspect</p> <p>Know the peculiar features and landmarks of individual teeth of the permanent dentition Use terminologies and describe essential features of the pulp canal</p> <p>Recognize the radiographic visualizations of pulp canals</p> <p>Understand the anatomy of the jaws and its relationship with the teeth</p> <p>Know the neurovascular supply to the jaws Know the anatomy of the temporomandibular joints and its functions Know mandibular movements and muscle activity Know the basic concepts of occlusion Define terminologies in occlusion and the regulatory aspects of occlusion</p>
--	--	---	---	--

			<p>cavities and canals</p> <p>8. Functional Anatomy of the maxillae and mandible and muscles of mastication</p> <ul style="list-style-type: none"> <li>• Osteology</li> <li>• Myology</li> <li>• Functions of the muscles</li> </ul> <p>9. The Temporomandibular apparatus</p> <ul style="list-style-type: none"> <li>• Temporomandibular articulation</li> <li>• Mandibular movements</li> <li>• Occlusion</li> </ul>	
	Dental Anatomy Practicals	Slide sessions and physical sessions with teeth, jaws, radiographs and simulations of the different oro-facial structures	<p>Be able to identify individual teeth from each jaw and side</p> <p>Be able to compare and contrast teeth with similar features</p> <p>Identify and contrast primary and permanent teeth</p> <p>Be able to recognize radiographs of different canals</p>	

**500 LEVEL**

**SUBJECT – ORAL MEDICINE (ORM)**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (40% contact time)	COMPREHENSION (30% contact time)	APPLICATION (30% contact time)
<p>Be able to diagnose and manage common oral lesions in Dentistry.</p> <p>Be able to identify and discuss commonly used drugs in dentistry, and manage their effects and reactions.</p> <p>Be able to discuss pain, its pathway, its pathophysiology and manage pain in the dental operatory.</p> <p>Be able to discuss the functional anatomy of the TMJ, and diagnose and discuss the management of Temporomandibular joint disorders.</p>	<p>Can identify common oral lesions in Dentistry.</p> <p>Can diagnose and manage common oral lesions in Dentistry</p> <p>Can list drugs commonly in dentistry, and discuss their effects, interactions and its management.</p> <p>Can draw the pain pathway, and discuss the pathophysiology of pain.</p> <p>Can discuss the different modalities of pain management in Dentistry.</p> <p>Can discuss the functional anatomy of the TMJ, and diagnose and discuss the management of Temporomandibular joint disorders.</p>	<p>Knowledge of the structure and appearance of the various oral lesions in oral medicine.</p> <p>Knowledge of the various drugs used in Dentistry, their uses and interactions.</p> <p>Knowledge of the pain pathway, and different management modalities of pain in Dentistry.</p> <p>Can describe the functional anatomy of the TMJ, and describe its disorders.</p>	<p>Compare and contrast various oral lesions.</p> <p>Can discuss the various options of pain management, including their indications, pros and cons.</p> <p>Identify indications for advanced tests in the oral medicine clinic.</p> <p>Can describe, and compare and contrast different TMJ management modalities.</p>	<p>Perform basic diagnostic tests in the oral cavity including toluidine blue staining, swabs and scrape test, etc.</p>

### COURSES CONTAINED

CODE	COURSE	COURSE CONTENT	LIST OF TOPICS	COURSE OUTCOMES
	Introduction to Oral Medicine	Commonly used terms and conditions in oral medicine and their clinical applications. History taking, Examination, Investigations, Informed Consent and referral in oral medicine.	<ol style="list-style-type: none"> <li>1. Definitions and Scope of Oral Medicine.</li> <li>2. Review of Clerkship, with emphasis on Clerking in the oral medicine clinic</li> <li>3. Principles of oral diagnosis in oral medicine.</li> <li>4. Interdisciplinary patient management.</li> </ol>	Understand the basic principles of patient management and interaction in oral medicine. Be able to describe the various modalities of diagnosing oral lesions in dentistry.
	Pharmacotherapy in Oral Medicine Practice	Pharmacokinetics, Pharmacodynamics, routes of drug administration, adverse drug reactions and drug interactions. Proper prescription writing, drug properties and dosages. Proper use of antibiotics, classifications, modes of action, and dosages.	<ol style="list-style-type: none"> <li>1. Introduction to Clinical Pharmacology.</li> <li>2. Commonly-prescribed drugs in dental practice.</li> <li>3. Principles of antibiotic therapy.</li> </ol>	Understand the basic principles of drug use in Dentistry.  Be able to describe and discuss the uses, effects and interactions of drugs used in Dentistry and their management.
	Oral Diseases	Identifying features, signs, symptoms and peculiarities of hard and soft tissue lesions of the oral cavity. Oral pre-malignancies and malignancies and considerations in their management. Types and clinical features of common salivary gland disorders.	<ol style="list-style-type: none"> <li>1. Ulcerative and vesiculo-bullous lesions.</li> <li>2. White and red lesions.</li> <li>3. Benign soft and hard tissue lesions of the oral cavity.</li> <li>4. Disorders of pigmentation.</li> <li>5. Oral pre-malignant and malignant lesions.</li> <li>6. Oro-facial complications of</li> </ol>	Be able to diagnose and manage common oral lesions in Dentistry.

			<p>non-surgical cancer therapy.</p> <p>7. Salivary gland disorders.</p>	
	Orofacial Pain and Temporomandibular Disorders	<p>Concept, definition and pathophysiology of pain.</p> <p>Pain management in dentistry and disorders of pain.</p> <p>Anatomy and function of the TMJ and clinical features and management of TMJ disorders</p>	<ol style="list-style-type: none"> <li>1. Pain definition and concepts.</li> <li>2. Pain pathway and pathophysiology.</li> <li>3. Neuropathic pain disorders.</li> <li>4. Anatomy and function of the TMJ</li> <li>5. Temporomandibular joint disorders.</li> </ol>	<p>Be able to describe the pain pathway, and the pathophysiology of pain, and its application to dentistry.</p> <p>Be able to manage pain in the dental practice.</p> <p>Be able to describe and discuss the management of TMJ disorders.</p>
	Dental Management Considerations in Patients with Systemic Disorders	<p>General principles of care in the medically compromised patient.</p> <p>Dental management considerations in patients with Cardiovascular diseases, Endocrine disorders, Neuromuscular disorders, Gastrointestinal disorders, Renal disorders, Respiratory disorders, Bleeding disorders and Immunodeficiencies.</p>	<ol style="list-style-type: none"> <li>1. General principles of care in the medically compromised patient.</li> <li>2. Dental management considerations in patients with systemic disorders.</li> </ol>	<p>Be able to describe and discuss the considerations while managing patients with systemic co-morbidities.</p> <p>Be able to discuss management of the medically-compromised patient.</p>
	Clinical Oral Medicine	<p>Diagnosis, Treatment planning and Management of Patients with various oral medicine disorders clinic, including those with systemic co-morbidities or reactions to pharmacotherapeutic treatment.</p> <p>Management of patients with systemic conditions</p> <p>Management of medical emergencies in the dental clinic.</p>	<p>Be able to identify and manage common oral lesions.</p> <p>Be able to identify and manage oral manifestations of systemic disorders.</p> <p>Be able to identify and manage common medical emergencies in the dental clinic.</p>	

**SUBJECT – ORAL AND MAXILLOFACIAL RADIOLOGY (OMFR)**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (60% contact time)	COMPREHENSION (30% contact time)	APPLICATION (10% contact time)
<p>Understand the physics and biology of dental radiology</p> <p>Understanding the different techniques of intraoral and extra-oral imaging</p> <p>Knowledge of the relevant dental anatomy to be able to detect aberration and pathologies.</p> <p>Ability to interpret different imaging modalities</p> <p>The application of dental radiology to clinical practice</p>	<p>Can list and describe the composition of x-ray machine and the processing solutions</p> <p>Can list and describe the factors controlling the x-ray beams</p> <p>Can list the safety precaution guidelines in the x-ray room</p> <p>Can discuss the manual processing of an x-ray film</p> <p>Can discuss periapical imaging techniques</p> <p>Can list the types and indication of occlusal imaging</p> <p>Can outline the indication for extra-oral imaging and types of extraoral imaging</p> <p>Can mention oral landmarks displayed within a radiographic image</p> <p>Can list the clinical application in radiology to detection of dental caries and periodontitis</p>	<p>Knowledge of the basic physics and principles of radiology</p> <p>Knowledge of the techniques of periapical and occlusal imaging</p> <p>Learning how to interpret intraoral imaging</p> <p>Knowledge of important landmarks that serve as aid in interpretation of radiographic images</p> <p>Introduction to basics and physics of advanced imaging modalities</p> <p>Knowledge of the relevant anatomy in order to identify presence of pathologies or deviation from normal</p>	<p>Describe the techniques of intraoral and extraoral imaging</p> <p>Identify specific landmarks and contact areas on a radiograph</p> <p>Describe the deterministic and stochastic effects of imaging</p>	<p>Be able to read and report common radiographs used in dental practice.</p> <p>Be able to take simple intra-oral and extra-oral views in Dentistry</p> <p>Be able to identify anatomic landmarks in intraoral and extraoral radiographs</p>



	Can discuss the role of radiology as an investigative in detection of benign and malignant conditions			
--	---	--	--	--

**COURSES CONTAINED**

<b>CODE</b>	<b>COURSE</b>	<b>COURSE CONTENT</b>	<b>LIST OF TOPICS</b>	<b>COURSE OUTCOMES</b>
	<b>Foundations of Radiology</b>	Radiation Physics, Biology & Protection Be able to understand the nature of radiation and the components of the x-ray machine Be able to understand the interactions of x-rays with matter and appropriate doses of x-rays Be able to enumerate the direct and indirect effects of x-rays on cells, tissues and organs Be able to design appropriate dose exposure risks mechanism Materials in Radiology, X-ray Processing & Quality Control Be able to identify processing solutions and their individual functions Be able to describe the steps of manual film processing Be able to describe the parameters of image sharpness and resolution	<ol style="list-style-type: none"> <li>1. Composition of matter and nature of radiation</li> <li>2. Radiation chemistry: Deterministic and Stochastic Effects</li> <li>3. Sources of radiation exposure</li> <li>4. Dose limits and reducing radiation exposure</li> <li>5. Components of the x-ray machine and factors controlling the ray beam</li> <li>6. Dosimetry</li> <li>7. -ray films and processing solutions</li> <li>8. arkroom equipment and manual/ automatic film processing</li> </ol>	Knowledge of the basic physics and principles of radiology Knowledge of the effect of radiation on biologic tissues Knowledge of the safety precautions and protection guidelines in x-rays usage  Knowledge of the X-ray machine and the beam it produces  Knowledge of the darkroom and processing solutions

	Intra-oral Radiographic Techniques	<p>Be able to describe paralleling and bisecting techniques</p> <p>Be able to describe the technique of periapical and occlusal imaging</p> <p>Be able to interpret both periapical and occlusal radiographs</p>	<ol style="list-style-type: none"> <li>1. rojection Geometry</li> <li>2. Principles and techniques of periapical imaging</li> <li>3. Types and technique of occlusal imaging</li> <li>4. Special considerations in intraoral imaging</li> <li>5. Intraoral anatomy and interpretations of intraoral radiography</li> </ol>	<p>Knowledge of the techniques of periapical and occlusal imaging</p> <p>Learning how to interpret intraoral imaging</p>
	Extra-oral and Specialized Radiographic Techniques	<p>Be able to outline indications for extra-oral imaging and types of extra-oral imaging</p> <p>Be able to describe the techniques of different types of extra-oral imaging including panoramic imaging</p> <p>Be able to describe the basics and types of advanced imaging modalities</p> <p>Be able to enumerate the indications and application of advanced imaging modalities</p>	<ol style="list-style-type: none"> <li>1. Selection criteria and techniques of extra-oral imaging</li> <li>2. Evaluation of extra-oral imaging</li> <li>3. Principles of panoramic imaging</li> <li>4. Interpretation of panoramic imaging</li> <li>5. Introduction to advanced imaging modalities</li> <li>6. ndications and applications of advanced imaging modalities</li> </ol>	<p>Knowledge of techniques of extra-oral imaging</p> <p>Knowledge of panoramic imaging interpretation</p> <p>Introduction to basics and physics of advanced imaging modalities</p> <p>Knowledge of the Clinical uses of advanced imaging modalities</p>
	Radiographic Interpretations	<p>Be familiar wit the basics of interpretation of intraoral and extra-oral radiographs</p>	<ol style="list-style-type: none"> <li>1. Description of adequate Diagnostic Images and analysis of Abnormal Findings</li> </ol>	<p>Knowledge of the criteria of a good radiograph</p> <p>Knowledge of the relevant</p>

		<p>Be able to outline the role of periapical and bitewing imaging I the investigation of caries</p> <p>Be able to describe alternative diagnostic aids in cariology</p> <p>Be able to outline the role of intra-oral imaging in the diagnosis and progression of periodontal disease</p> <p>be able to describe the radiological appearance with the radiographic margins of cysts and tumours.</p> <p>Be able to describe the radiological features of benign bone diseases</p> <p>Be able to outline differential diagnosis following their radiological analysis</p> <p>Be able to differentiate between normal and aberrant anatomy of the paranasal sinuses and TMJ</p>	<ol style="list-style-type: none"> <li>2. Steps in analysis of intra-osseous lesions</li> <li>3. Radiology in detection of dental caries, and alternate diagnostic Tools</li> <li>4. Radiology in periodontal diseases detection and therapy</li> <li>5. Imaging features of cysts and benign tumours</li> <li>6. Imaging features of other bone diseases</li> <li>7. Imaging features of malignant diseases</li> <li>8. Imaging features of salivary gland diseases</li> <li>9. Imaging features of paranasal sinuses and TMJ diseases</li> <li>10. Imaging features of dental and craniofacial anomalies</li> </ol>	<p>anatomy and important landmarks in order to identify presence of pathologies or deviation from normal</p> <p>Knowledge of the role of imaging as a diagnostic caries aid, and in detection of periodontal disease</p> <p>Knowledge of peculiar and / or generalized imaging characteristics to arrive at a diagnosis for pathologies of the TMJ, salivary gland and paranasal sinuses</p>
	Practical Oral Radiology	<p>Periapical radiography and its interpretation</p> <p>Bitewing radiography and its interpretation</p> <p>Occlusal radiography and its interpretation</p> <p>Orthopantomogram and its interpretation</p> <p>More specialized radiographic techniques</p>	<p>Be able to take simple intra-oral and extra-oral views in Dentistry</p> <p>Be able to read and report common radiographs used in dental practice.</p> <p>Be able to identify anatomic landmarks in intraoral and extraoral radiographs</p>	

**SUBJECT – ORAL PATHOLOGY (ORP)**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (40% contact time)	COMPREHENSION (30% contact time)	APPLICATION (30% contact time)
<p>Have an advanced understanding of all branches of oral and maxillofacial pathology and the role of oral and maxillofacial pathology in diagnosis and patient management<sup>[LSEP]</sup></p> <p>Ability to independently report routine histopathology slides after acquisition of relevant information for the suspected disease process being investigated.</p> <p>Possession of sufficient knowledge of laboratory procedures to be able to “trouble-shoot” problems, including accessioning problems, artefacts, staining problems etc. to ensure accurate formulation of diagnostic modalities</p>	<p>Can list and describe the types, components and roles of the different microscopes and all the steps in tissue processing.</p> <p>Can discuss the role of disease organisms and host response in the formation and progression of infectious diseases.</p> <p>Can discuss the etiology, pathogenesis and histopathological features and management of odontogenic cysts and tumours including their molecular basis</p> <p>Can discuss the etiology and pathogenesis and histopathological features and management of non- odontogenic tumours and benign bone pathologies</p> <p>Can describe the etiology, pathology and sequelae of pulpal, periapical and periodontal diseases</p> <p>Can describe orofacial syndromes and discuss specific</p>	<p>Knowledge of principles of microscopy and histo-techniques and an overview of advanced diagnostic techniques</p> <p>Knowledge of the etiology, pathogenesis, clinical features, histopathologic features and management modalities of pathologic conditions in the oral cavity</p> <p>Knowledge of the various means by which the pathologic conditions can be diagnosed with sufficient clinical and investigative details</p>	<p>Describe the peculiar histo-pathological features of individual pathologic conditions</p> <p>Identify specific features on photomicrographs and explain its pathophysiology</p>	<p>Process a biopsied specimen after accessioning</p> <p>Mount slides and report diagnosis after identifying peculiar features</p> <p>Outline further investigative modalities</p>

	diseases of the lips and tongue			
--	---------------------------------	--	--	--

**COURSES CONTAINED**

CODE	COURSE	COURSE CONTENT	LIST OF TOPICS	COURSE OUTCOMES
	Introductory Oral and Maxillofacial Pathology	<p>History of microscope, types and components of a microscope, principle and specialized microscopy techniques. Outlining steps in tissue processing, explain the role and function of the materials and solutions involved per step and list errors and problems in tissue processing</p> <p>Highlight the limitations in conventional H and E staining; describe the basics of the advanced techniques. Enumerate their applications in diagnosis and management.</p> <p>Be able to explain the stages of development of the face, stages of development of the tooth and enumerate the clinical implications of odontogenesis</p> <p>Be able to explain common terms used in oral pathology, identify these terms in microscopy slides and combine the terms to describe and arrive at a histopathologic diagnosis.</p> <p>Be familiar with the laboratory, learn all safety guidelines and perform routine procedures in histopathology independently</p>	<ol style="list-style-type: none"> <li>1. Microscopy</li> <li>2. Tissue Processing</li> <li>3. Introduction to Advanced Diagnostic Techniques</li> <li>4. A review of Embryogenesis and Odontogenesis</li> <li>5. Terminologies in Oral Pathology</li> <li>6. Histo-techniques</li> <li>7.</li> </ol>	<p>Recognize the macroscopic and microscopic features of normal tissues and the pathological basis of diseases</p> <p>Understand aspects of normal oral biology and pathophysiology that are relevant to the practice of oral and maxillofacial pathology</p> <p>Understand principles of fixation of tissues and tissue processing procedures</p> <p>Describe principles of advanced diagnostic techniques for example, immunohistochemistry, immunofluorescence, etc. and the uses of these techniques</p>

Pathological aspects of Oral Diseases	<p>Be able to understand the principles and terminologies of genetics, developmental disturbances of oral structures &amp; aetiopathogenesis of orofacial anomalies.</p> <p>Be able to understand aetiology and clinical features of tumours of epithelial tissue origin, connective tissue origin, muscle and nerve</p> <p>Be able to understand anatomy and histology of salivary glands, theories of salivary gland tumorigenesis. Learn classifications of salivary gland tumors understand tumours of salivary gland</p> <p>outline different classification systems of cysts with emphasis on W.H.O. classification, understand aetiopathogenesis and pathophysiology of cysts and understand histopathological features and management modalities of cysts</p> <p>Be able to understand the clinical features and histopathology of benign and malignant odontogenic tumours</p>	<ol style="list-style-type: none"> <li>1. Tooth and Craniofacial anomalies</li> <li>2. Benign lesions of the Oral Cavity</li> <li>3. Malignant lesions of the oral cavity</li> <li>4. Benign and Malignant Lesions of Salivary Glands</li> <li>5. Cysts of the Oral and Maxillofacial region</li> <li>6. Benign tumors of Odontogenic origin</li> <li>7. Malignant tumors of Odontogenic Origin</li> </ol>	<p>Use clinical knowledge to formulate clinicopathological correlations<sup>[L][SEP]</sup></p> <p>Diagnose basic histopathological changes in biopsies from oral mucosa, bone, skin, blood vessels and the lymphoid system<sup>[L][SEP]</sup></p> <p>Understand the investigative aspects of microbiology, biochemistry, medical genetics and other disciplines that are relevant to the practice of oral and maxillofacial pathology</p>
Infections of the Oral Cavity	<p>Be able to understand the basics of clinical microbiology as it pertains to oral pathology, understand the pathogenesis and oral manifestations of common bacterial, viral and mycotic infections of the oral cavity</p> <p>Be able to outline their investigative tools (including serology) and their</p>	<ol style="list-style-type: none"> <li>1. Bacterial infections of the oral cavity</li> <li>2. Viral infections of the oral cavity</li> <li>3. Mycotic infections of the oral cavity</li> <li>4. Diseases of the Periodontium</li> <li>5. Dental Caries, Pulpal</li> </ol>	<p>A clear understanding of orofacial infections, anatomic routes of spread and salient clinical presentations<sup>[L][SEP]</sup></p> <p>Knowledge of specific etiological organisms and their pathogenesis of disease causation</p> <p>Basic comprehension of myriad investigative channels with</p>

		<p>histopathological features.</p> <p>Be able to describe the anatomy of the healthy periodontium and outline local and systemic factors associated with periodontal diseases</p> <p>Be able to understand the etiology and histopathology of dental caries</p> <p>Be able to understand the classification, etiology, clinical features and management of osteomyelitis</p>	<p>diseases, and Periapical tissues</p> <p>6. Spread of oral infections</p>	<p>preventive and definitive therapeutic considerations<sup>[1]</sup><sub>[SEP]</sub></p> <p>Understanding the complications and prognosis of each orofacial infection with their therapeutic modalities</p>
	Systemic Diseases of the Jaws	<p>Be able to understand metabolic diseases of bone and the oral manifestations</p> <p>Be able to understand fibro-osseous lesions, its types and to outline molecular genetics and clinical features of the heterogeneous bone pathologies.</p> <p>Be able to understand diseases affecting all blood cells and to outline the investigative and management modalities of these lesions</p> <p>Be able to understand genodermatoses and the histopathology of immuno-bullous lesions.</p> <p>Be able to outline the role of adjunct diagnostic techniques e.g. immunofluorescence in their definitive diagnoses.</p> <p>Be able to understand disturbances in the fifth, seventh and ninth cranial nerves</p>	<p>1. Benign bone pathologies</p> <p>2. Diseases of the blood and blood-forming organs</p> <p>3. Diseases of the skin</p> <p>4. Diseases of the Nerves</p>	<p>Understand heterogeneous group of disorders with oral components or strictly oral manifestations<sup>[1]</sup><sub>[SEP]</sub></p> <p>Understand basic histopathological changes in the systems which may equally be manifested in the oral cavity components<sup>[1]</sup><sub>[SEP]</sub></p> <p>Understand the investigative aspects of biochemistry and medical genetics that are relevant to the diagnoses these lesions/conditions</p>

	Syndromes and Diseases of Specific Systems	<p>Be able to define a syndrome and common causes of syndromes</p> <p>Be able to understand and describe syndromes associated with deficient jaws including cleft lip/ palate</p> <p>Be able to understand and describe syndromes associated with connective tissue diseases</p> <p>Be able to understand the anatomy of the tongue, classification of tongue disorders and describe local and diffuse swelling of the lips.</p> <p>Be able to understand the anatomy of the lips, classification of tongue disorders and describe diseases of lingual mucosa, body of tongue and tumors involving the lips</p>	<ol style="list-style-type: none"> <li>1. Causes and clinical approach to syndromes</li> <li>2. Syndromes associated with the defects in the mandible and maxilla</li> <li>3. Syndromes associated with connective tissue pathologies</li> <li>4. Specific diseases of the tongue</li> <li>5. Specific diseases of the lips</li> </ol>	<p>Understanding of syndromes of the orofacial region [SEP]</p> <p>Knowledge of specific features that comprises each of the orofacial syndromes</p> <p>Basic comprehension of the molecular basis and etiologies</p> <p>Understanding the complications and prognosis of each syndrome with their therapeutic modalities</p> <p>Understanding diseases associated with the tongue and lips</p>
	Practical and Surgical Oral Pathology	<p>Surgical preparation of the Specimen</p> <p>Simple pathological investigations</p> <p>Advanced pathological investigations</p>	<p>Be able to discuss the steps involved in preparing the specimen for microscopy.</p> <p>Be able to perform basic prophylaxis on all kinds of patients.</p>	



**SUBJECT - ORTHODONTICS (ORT)**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (25% contact time)	COMPREHENSION (25% contact time)	APPLICATION (50% contact time)
<p>Be able to describe the anatomical and physiological basis of the practice of orthodontics.</p> <p>Be able to describe the features and treatment of the different classes of malocclusion</p> <p>Be able to draw a comprehensive orthodontic treatment plan.</p> <p>Be able to fabricate and describe the use of various orthodontic appliances.</p> <p>Be able to describe the use of fixed appliance therapy.</p>	<p>Can describe the anatomical and physiological basis of the practice of orthodontics.</p> <p>Can describe the features and treatment of the different classes of malocclusion</p> <p>Can draw a comprehensive orthodontic treatment plan.</p> <p>Can fabricate and describe the use of various orthodontic appliances.</p> <p>Can describe the use of fixed appliance therapy.</p>	<p>Can describe the anatomical and physiological basis of the practice of orthodontics.</p> <p>Can describe the features and treatment of the different classes of malocclusion</p> <p>Can describe the use of fixed appliance therapy.</p>	<p>Can describe the use of fixed appliance therapy.</p>	<p>Be able to draw a comprehensive orthodontic treatment plan.</p> <p>Be able to fabricate and describe the use of various orthodontic appliances.</p>

**COURSES CONTAINED**

<b>Code</b>	<b>Course</b>	<b>Course content</b>	<b>List of topics</b>	<b>Course outcomes</b>
	Introductory orthodontics	<p>History, definition and scope of orthodontics</p> <p>Normal development of occlusion and oral function</p> <p>Growth of facial skeleton, including Theories of facial growth</p> <p>Classification, Aetiology, Epidemiology, and Health risks associated with malocclusion, Malposition of teeth and mal-relation of arches.</p>	<ol style="list-style-type: none"> <li>1 Introduction to orthodontics.</li> <li>2 Development and Growth of facial skeleton.</li> <li>3 Eruption of teeth, occlusion &amp; oral function.</li> <li>4 Malocclusion.</li> <li>5 Indices used in Orthodontics.</li> <li>6 Review of Clerkship, with emphasis on clerking of an Ortho patient.</li> </ol>	<p>Be able to define orthodontics and discuss its history and scope.</p> <p>Be able to describe the growth of facial skeleton and its relevance</p> <p>Be able to discuss the development of occlusion, eruption and normal oral function, and relate it to the aetiology and health risks associated with malocclusion.</p> <p>Be able to list and describe the use of common indices used in orthodontics.</p>
	Investigations, diagnosis and treatment planning in orthodontics	<p>Assessment of an orthodontic patient.</p> <p>Use of casts, Cephalometry, and other radiological investigations in orthodontics.</p> <p>Description of the various differential diagnoses in Orthodontics</p> <p>Principles of treatment planning.</p>	<ol style="list-style-type: none"> <li>1 Examination of an orthodontic patient</li> <li>2 Assessment of crowding and space analysis</li> <li>3 Methods of investigating/assessing soft tissue form and function</li> <li>4 Radiology for orthodontics</li> <li>5 The Orthodontic Treatment Plan</li> <li>6 Angles class I malocclusion-</li> </ol>	<p>Be able to sequentially and exhaustively take history and examine an orthodontic patient, and understand the rationale for each step.</p> <p>Be able to identify, discuss the indications for, and describe the various radiographic and non-radiographic investigations in Orthodontics.</p> <p>Be able to describe the different classes of malocclusion.</p> <p>Knowledge of the basic principles of management of the various classes of</p>

			<p>features and treatment</p> <p>7 Angles class II division 1- features and treatment</p> <p>8 Angles class II division 2- features and treatment</p> <p>9 Angles class III malocclusion- features and treatment</p>	malocclusion.
	Orthodontic treatment options	<p>Physiology of tooth movement, and its application in Orthodontics.</p> <p>Description of the various treatment options in orthodontics, including removable and fixed appliances.</p> <p>Description of current concepts in orthodontics, including aesthetic brackets, lingual brackets, invisalign, etc.</p>	<ol style="list-style-type: none"> <li>1. Physiology of tooth movement</li> <li>2. Interceptive orthodontics</li> <li>3. Serial extraction</li> <li>4. Removable appliances</li> <li>5. Functional appliances</li> <li>6. Fixed appliances</li> <li>7. Current concepts in orthodontics</li> </ol>	<p>Be able to discuss the physiology of tooth movement.</p> <p>Be able to list sequentially, and describe the rationale for steps in interceptive orthodontics and serial extraction.</p> <p>Be able to list various removable appliances, their components, and describe a few in detail.</p> <p>Be able to list various functional appliances, their components, and describe a few in detail.</p> <p>Be able to list various modalities of fixed appliance therapy, and describe its components and principles in detail.</p> <p>Be able to select the appropriate treatment options for an orthodontic patient.</p>

	Applied Orthodontics	<p>Common oral habits and their management in orthodontics.</p> <p>Orthodontic management of patients, including the unerupted canine, cleft patients, and adult orthodontics.</p> <p>The role of wisdom teeth in orthodontics.</p> <p>Deleterious effects of orthodontic treatment</p>	<ol style="list-style-type: none"> <li>1. Management of Oral habits</li> <li>2. Orthodontic management of cleft patients</li> <li>3. Orthodontic management of unerupted canine</li> <li>4. Wisdom teeth and their role in orthodontics</li> <li>5. Orthodontic management of adult/adolescent patients.</li> <li>6. The role of orthodontists in management of the orthognathic surgery patient.</li> <li>7. Deleterious effects of orthodontic treatment</li> </ol>	<p>Be able to list and describe common oral habits and the rationale and options for their management.</p> <p>Be able to describe the role of orthodontics in the management of patients with unerupted canines, clefts etc</p> <p>Be able to describe the challenges and intricacies of adult orthodontics.</p> <p>Be able to describe the role of wisdom teeth in orthodontics.</p> <p>Be able to list and explain the deleterious effects of orthodontic treatment</p>
	Clinical and practical orthodontics	<p>Materials used in orthodontics, including wires of different gauges, instruments and consumables used for fabricating appliances.</p> <p>Practical fabrication of appliances and wire bending for appliances including Adam’s clasp, Labial bow, Single cantilever spring, Double cantilever spring, C-clasp, and W wire</p> <p>Clinical management of patients with various orthodontic</p>		<p>Be able to identify the different gauges of wires used in orthodontics and their indications.</p> <p>Be able to identify and use different orthodontic instruments to fabricate indicated appliance components.</p> <p>Be familiar with the steps involved in</p>

		complaints including serial extractions, removable appliances etc.	management of various orthodontic conditions.
--	--	--	---

**SUBJECT - PEDIATRIC DENTISTRY (PED)**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (25% contact time)	COMPREHENSION (25% contact time)	APPLICATION (50% contact time)
<p>Be able recognize developmental milestones, describe the eruption sequence, and discuss the differences between the adult and primary dentition.</p> <p>Be able to relate the development of the dentition to the process of eruption and the aetiology of structural abnormalities and occlusal problems</p> <p>Should know the various methods of promoting positive behavior in children, and other methods of managing behavior in children.</p> <p>Be able to manage and prevent common conditions in pediatric dentistry.</p>	<p>Can recognize developmental milestones, describe the eruption sequence, and discuss the differences between the adult and primary dentition.</p> <p>Can describe the development of the dentition and the process of eruption</p> <p>Can identify and describe various structural abnormalities of teeth and occlusal problems</p> <p>Can promote positive behavior in children, and describe other methods of managing behavior in children.</p> <p>Can manage common dental complaints in the pediatric dental clinic.</p> <p>Can discuss prevention in</p>	<p>Can describe and recognize developmental milestones.</p> <p>Can describe the eruption sequence</p> <p>Can discuss the differences between the adult and primary dentition.</p> <p>Can describe various structural abnormalities of teeth and occlusal problems</p>	<p>Compare identify and contrast adult and primary teeth.</p> <p>Can identify and describe various structural abnormalities of teeth and occlusal problems</p> <p>Can describe methods of managing behavior in children.</p>	<p>Can apply prevention principles to patients and the paediatric dentistry clinic.</p> <p>Can promote positive behavior in children.</p> <p>Can manage pulpal conditions secondary to caries and trauma following sound principles.</p>

Be able to discuss the management of children with special care needs.	pediatric dentistry. Can discuss the management of children with special care needs.			
--	---	--	--	--

### COURSES CONTAINED

CODE	COURSE	COURSE CONTENT	LIST OF TOPICS	COURSE OUTCOMES
	Introduction to Paediatric Dentistry	General and dental developmental milestones in children, and the differences between management in the adult and in the child.  Eruption of teeth, and the difference between the adult and child dentition.	<ol style="list-style-type: none"> <li>1. Introduction to Paediatric Dentistry</li> <li>2. Milestones in Child Development</li> <li>3. Development of the dentition</li> <li>4. Review of Clerkship, with bias to Pediatric Dentistry</li> </ol>	<p>Be able recognize developmental milestones</p> <p>Be able to describe the eruption sequence, and discuss the differences between the adult and primary dentition.</p>
	Hard and Soft Tissue Disorders and Craniofacial Anomalies	<p>Soft tissue disorders</p> <p>Hard tissue disorders at different stages of dental development</p> <p>Considerations in the dental management of disorders and anomalies including Cleft Lip and Palate</p>	<ol style="list-style-type: none"> <li>1. Oral soft tissue lesions and anomalies in children</li> <li>2. Dental anomalies:               <ol style="list-style-type: none"> <li>(a) Eruption and exfoliation disorders</li> <li>(b) Disorders of tooth number, size and form or shape</li> <li>(c) Disorders of tooth structure</li> <li>(d) Common occlusal problems during tooth exchange</li> </ol> </li> </ol>	<p>Be able to relate the development of the dentition to the process of eruption</p> <p>Be able to relate the development of the dentition to the aetiology of structural abnormalities and occlusal problems</p>
	Behavioural Management	<p>Principles of child psychology</p> <p>Non-pharmacological and</p>	<ol style="list-style-type: none"> <li>1. Child Psychology</li> <li>2. Pain control for children</li> <li>3. Non-pharmacological</li> </ol>	Should know the various methods of promoting positive behavior in children

		pharmacological options for behavior management and pain control	management 4. Pharmacological management	Should know other methods of managing behavior in children.
Therapy & Prevention in Paediatric Dentistry	<p>Considerations during treatment of primary teeth</p> <p>Treatment options for primary and young permanent teeth</p> <p>Indications for extraction, and types of Space maintainers and space regainers</p> <p>Caries as an environmental disease, and its impact on prevention of Caries</p> <p>Role of oral hygiene, diet, fluoride and new restorative materials in the prevention of caries</p> <p>Risk assessment in the management and prevention of Dental caries</p> <p>Prevention of other conditions in pediatric dentistry (trauma to teeth, medical emergencies.)</p>	<p>1. Dental Therapeutics</p> <p>2. Exodontia in primary and young permanent teeth</p> <p>3. Pulp Therapy</p> <p>(a) Indirect and Direct Pulp Capping</p> <p>(b) Pulpotomy</p> <p>(c) Pulpectomy</p> <p>(d) Apexification</p> <p>(e) Apexogenesis</p> <p>3. Trauma management</p> <p>5. Management of space problems</p> <p>6. Prevention of Dental Caries in the child – Oral Hygiene, Diet</p> <p>7. Prevention of Caries – Fluoride and Restorative materials</p> <p>8. Risk assessment in Dentistry</p> <p>9. Medical emergencies</p>	<p>Be able to recognize symptoms of pulp diseases and accurately diagnose them.</p> <p>Be able to draw up appropriate treatment plans.</p> <p>Be able to perform simple pulpal treatments</p> <p>Be able to identify and fabricate simple space maintainers.</p> <p>Have basic knowledge of the definition, aetiology and risk factors for dental caries, and the means by which conditions are prevented.</p>	
Management of Children With Special Care Needs	<p>Familiarity with categories of individuals with special health care needs</p> <p>Identify barriers to oral healthcare and areas of intervention by the</p>	<p>1. Management of children with special needs</p> <p>2. Genetic counseling</p> <p>3. Speech pathology and therapy relating to dental care</p>	The student should be able to recognize Children with special health care needs as well as their dental peculiarities and management	

		<p>dental team</p> <p>Identify resources available for the care of children with special care needs</p>		
	<p>Clinical and Practical Paediatric Dentistry</p>	<p>Identification of primary and permanent teeth</p> <p>Surgical considerations in primary and permanent teeth</p>	<ol style="list-style-type: none"> <li>1. Oral Diagnostics</li> <li>2. Dental Therapeutics</li> <li>3. Identification of teeth</li> <li>4. Placement of Rubber Dam</li> <li>5. Identification and Placement of matrix, band, retainers and wedges.</li> <li>6. Principles of Cavity Preparation</li> <li>7. Cavity Preparation: Class I and II cavities</li> <li>8. Stainless Steel Crown Preparations and Placement on Anterior and Posterior Teeth</li> <li>9. Veneers</li> <li>10. Space Maintainers</li> <li>11. Acid-Etch Technique</li> <li>12. Pulp Therapy: <ol style="list-style-type: none"> <li>(a) Indirect and Direct Pulp Therapy</li> <li>(b) Pulpotomy</li> <li>(c) Pulpectomy</li> </ol> </li> </ol>	<p>Be to identify teeth based on their morphological characteristics,</p> <p>Be able to practice isolation techniques and cavity preparation using available aids and devices for restoration</p> <p>Be able to practice pulp treatment</p> <p>Be able to place stainless steel crowns</p> <p>Be able to identify materials used for dental arch space management</p>



**600 LEVEL**

**SUBJECT – ORAL AND MAXILLOFACIAL SURGERY (OMFS)**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (25% contact time)	COMPREHENSION (25% contact time)	APPLICATION (50% contact time)
<p>Provide a foundation for the future practice of oral and maxillofacial surgery</p> <p>Understand the rationale and know the principles of minor oral surgery and maxillofacial surgery</p> <p>To know and describe various maxillofacial conditions, their characteristics and their management.</p> <p>Know the complications of treatment of various conditions, and can prevent and manage them.</p> <p>Conduct oneself professionally in the minor oral surgery operatory and the ward, clinic and maxillofacial theatre.</p>	<p>Knows the principles of oral and maxillofacial surgery and their rationale.</p> <p>Can discuss the rationale for maxillofacial surgery procedures.</p> <p>Knows various maxillofacial conditions, their characteristics and their management.</p> <p>Can list, describe and manage complications of treatment of various conditions.</p> <p>Can interact with the minor oral surgery operatory and maxillofacial surgery ward, clinic and theatre in a professional, aseptic manner.</p>	<p>Knows the principles of oral and maxillofacial surgery and their rationale.</p> <p>Knows various maxillofacial conditions, their characteristics and their management.</p> <p>Can list, describe and manage complications of treatment of various conditions.</p>	<p>Can discuss the rationale for maxillofacial surgery procedures.</p>	<p>Perform intra-alveolar extraction.</p> <p>Perform transalveolar extraction.</p> <p>Can manage alveolar osteitis.</p> <p>Can interact with the minor oral surgery operatory and maxillofacial surgery ward, clinic and theatre in a professional, aseptic manner.</p>

## COURSES CONTAINED

CODE	COURSE	COURSE CONTENT	LIST OF TOPICS	COURSE OUTCOMES
	Introduction to Oral and Maxillofacial Surgery		<ol style="list-style-type: none"> <li>1. Wound healing – soft and hard tissues</li> <li>2. Systemic conditions of importance to the oral and maxillofacial surgeon</li> <li>3. Review of Clerkship, with a bias to Oral and Maxillofacial Surgery</li> <li>4. Pre-operative assessment of the maxillofacial patient</li> <li>5. Principles of minor oral surgery</li> <li>6. Sepsis, Aseptic Techniques and sterilization in oral and maxillofacial surgery</li> <li>7. Clinical investigations in oral and maxillofacial surgery</li> </ol>	<p>Provide a foundation for the future practice of oral and maxillofacial surgery</p> <p>Understand the rationale and know the principles of minor oral surgery</p>
	Exodontia in Mature Permanent teeth	Principles of minor oral surgery including vision, access Preoperative Patient assessment in exodontias. Principles and complications of tooth extractions.	<ol style="list-style-type: none"> <li>1. Review of Local Anaesthesia in Dentistry</li> <li>2. Introduction to Exodontia Indications and contraindications for tooth extraction.</li> <li>3. Pre-operative assessment in Intraalveolar/transalveolar extractions.</li> <li>4.</li> </ol>	<p>Understand and know the principles of intraalveolar and transalveolar exodontia</p> <p>Understand and know the steps involved in intraalveolar and transalveolar exodontia</p> <p>Know the complications of exodontia and their management</p>

			<p>5. intra-alveolar exodontia</p> <p>6. extra-alveolar Exodontia</p> <p>7. Complications of extraction and management.</p>	
	Traumatology	<p>Triage, Basic life and advanced trauma life support and care; Glasgow Coma Scale</p> <p>Oral and maxillofacial emergencies</p> <p>Haemorrhage in oral and maxillofacial surgery</p> <p>Classification and Signs and symptoms of mandibular fractures, mid-facial fractures</p> <p>Investigations in the management of facial fractures</p> <p>Principles of treatment of mandibular fractures – indications and contraindications of open and closed reduction.</p> <p>Indications for and principles of treatment of Lefort, zygomatic, alveolar and panfacial fractures.</p> <p>Condylar fractures - classification, open vs closed reduction.</p> <p>Peculiarities and treatment of facial fractures on children and the elderly.</p>	<ol style="list-style-type: none"> <li>1. Principles of management of the trauma patient and maxillofacial emergencies.</li> <li>2. Management of Soft tissue injuries</li> <li>3. Management of Mandibular fractures</li> <li>4. Management of fractures of the Middle third of the skeleton</li> <li>5. Complications of facial fractures and their treatments.</li> </ol>	<p>Understand and know the principles of emergency patient care in the event of trauma.</p> <p>Know the signs and symptoms of facial fractures.</p> <p>Know, and be able to interpret investigation results in the treatment of facial fractures.</p> <p>Understand the indications and contraindications of closed and open reductions in the treatment of facial fractures.</p> <p>Be able to describe the principles of treatment of facial fractures.</p>
	Infections of the mouth and jaws	<p>Fascial spaces related to the maxilla and mandible – boundaries and contents.</p> <p>Cellulitis and abscesses involving fascial spaces of the related to the maxilla and mandible – aetiology, signs and symptoms,</p>	<ol style="list-style-type: none"> <li>1. Fascial Spaces and routes of spread.</li> <li>2. Principles of infection management and antibiotic therapy</li> </ol>	<p>Be able to investigate and diagnose oro-facial infections</p> <p>Understand the basic principles of treatments of oro-facial infections.</p>

		<p>investigations and principles of management. Diseases of the Maxillary sinus with special reference to oro-antral fistula</p> <p>Alveolar osteitis, osteomyelitis and osteoradionecrosis – aetiology, classifications, clinical features, predisposing, factors and management.</p>	<ol style="list-style-type: none"> <li>3. Odontogenic infections and their management.</li> <li>4. Non-odontogenic infections of soft tissue and their management.</li> <li>5. Hard tissue infections and their management.</li> <li>6. Salivary gland infections and their management.</li> <li>7. Atypical infections of the head and neck and their management.</li> <li>8. Immune suppression and head and neck infections</li> <li>9.</li> </ol>	
	<b>Oral Oncology</b>	<p>Classifications, diagnosis and management of cysts and cyst-like lesions of the jaws</p> <p>Diagnosis and management of tumours of the jaws and salivary gland</p> <p>Benign odontogenic and non-odontogenic swellings including hematoma, salivary gland swellings</p> <p>Reconstruction in oral and maxillofacial surgery - Alloplasts, Grafts, flaps (Local/ Regional and Microvascular tissue transplantation); Distraction osteogenesis.</p> <p>Tissue transplantation in oral and maxillofacial surgery (bone, skin and tooth grafts, use of non-biological tissues) principles and practice.</p> <p>Recent advances in reconstructive surgery</p>	<ol style="list-style-type: none"> <li>1. Cysts of the jaws</li> <li>2. Benign odontogenic swellings</li> <li>3. Benign non-odontogenic swellings</li> <li>4. Carcinomas</li> <li>5. Sarcomas</li> <li>6. Maxillofacial Reconstruction and Tissue transplantation.</li> <li>7. Recent advances in reconstructive surgery.</li> </ol>	<p>Be able to investigate and diagnose Oral lesions</p> <p>Be able differentiate between benign and malignant Oral lesions</p> <p>Understand the basic principles of Maxillofacial reconstructive surgery.</p>

	<p><b>Surgical management of Congenital and Cranio-facial pathologies</b></p>	<p>Differential diagnosis of congenital swellings of the orofacial region. Theories of cleft lip and palate formation, Classification, clinical problems associated with cleft lip and palate, and Syndromes associated with cleft lip and palate.</p> <p>Role of the multidisciplinary team in the management of cleft lip and palate patients and introduction to surgical techniques used in the repair of cleft lip and palate.</p> <p>Vascular and lymphatic lesions of the orofacial region – arteriovenous malformations, lymphangioma, Haemangiomas,</p> <p>Pre-prosthetic surgery including oral implantology Surgical Orthodontics - broad outlines</p>	<ol style="list-style-type: none"> <li>1. Differential diagnosis of congenital swellings of the oro-facial region</li> <li>2. Clefts, associated syndromes, and its management</li> <li>3. Vascular and lymphatic lesions of the oro-facial region and their management</li> <li>4. Other syndromes and anomalies of importance in Dentistry</li> <li>5. Pre-prosthetic surgery and implantology</li> <li>6. Surgical Orthodontics</li> </ol>	<p>Be able to identify and provide differentials for congenital oro-facial swellings.</p> <p>Understand the role of different specialties in the management of cleft lip and palate.</p> <p>Be able to carry out parental counselling in the event of cleft lip and palate in a new born.</p> <p>Be able to surgery carried out for pre-prosthetic and orthodontic reasons, and their rationale.</p>
	<p><b>Diagnosis &amp; Management of TMJ and neurological disorders</b></p>	<p>Temporomandibular joint – anatomy, disorders and management, including TMJ/Myofascial pain dysfunction syndrome, TMJ dislocations and ankyloses. Facial nerve palsy – aetiology, classification and management; trigeminal neuralgia and glossopharyngeal neuralgia and multiple sclerosis.</p>	<ol style="list-style-type: none"> <li>1. Surgical and functional anatomy of the TMJ</li> <li>2. TMJ Disorders and their management.</li> <li>3. Neurological disorders in oral and maxillofacial surgery-</li> </ol>	<p>Understand the predisposing/aetiological factors of TMJ disorders.</p> <p>Understand and know the various TMJ investigative modalities</p> <p>Understand and know the various surgical treatments appropriate for the management of TMJ disorders.</p> <p>Understand and know the aetiology and clinical features of various neurological disorders, and their management.</p>
	<p><b>Exodontia Practical</b></p>	<p>Armamentarium of local anaesthesia in dental practice Techniques of local anaesthesia in dentistry Instrumentation in exodontia. Clinical demonstrations and practice of</p>	<ol style="list-style-type: none"> <li>1. Preoperative Patient assessment in exodontias.</li> <li>2. Infiltration and block techniques used in exodontias.</li> <li>3. Armamentarium and Clinical demonstrations and practice of the principles of intra-alveolar forceps exodontias including haemorrhage control.</li> </ol>	

		<p>exodontia Principles and complications of tooth extractions.</p>	<p>4. Armamentarium, Clinical demonstrations and practice of trans-alveolar exodontias 5. Management of post-extraction bleeding and alveolar osteitis.</p>
	<p><b>Maxillofacial Surgery Clinicals and Theatre</b></p>	<p>Introduction to the layout and use of the theatre.</p> <p>Drugs and drug interactions in oral and maxillofacial surgery, and properties of General anaesthetic drugs commonly used.</p> <p>Pre-anaesthetic preparation of a patient and pre-medication, as well as evaluation of a patient for GA; Short anaesthesia in Oral and Maxillofacial surgery, conscious sedation and endotracheal anaesthesia; Complications of GA and management.</p> <p>History taking and clinical examination in oral and maxillofacial surgery (examination of pain, ulcers and lumps). Importance of general condition of the patient in relation to oral and maxillofacial surgery.</p>	<p>1. The Maxillofacial surgery theatre 2. Surgical Instrumentation in oral and maxillofacial surgery 3. General Anaesthesia (GA) in oral and maxillofacial surgery. 4. History taking and clinical examination in oral and maxillofacial surgery ( ) 5. Systemic considerations in oral and maxillofacial surgery 6. Drugs and drug interactions in oral and maxillofacial surgery</p>

**SUBJECT - DENTAL PUBLIC HEALTH (DPH)**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (60% contact time)	COMPREHENSION (30% contact time)	APPLICATION (10% contact time)
<p>Be able to explain key concepts in Dental Public Health</p> <p>Appreciate the place and role of discipline of Dental Public Health in the wider profession of Dentistry.</p> <p>Appreciate the role of other disciplines of Dentistry in Dental Public Health.</p> <p>Appreciate the role of other non-dental disciplines, e.g. behavioural sciences and economics, in Dental Public Health.</p>	<p>Apply the concepts of epidemiology and biostatistics to community and individual oral health.</p> <p>Apply the principles of disease prevention and health promotion, including individual and community-based methods.</p> <p>Have knowledge of local and global oral health policy, healthcare organization and primary oral care provision.</p> <p>Have knowledge of the prevalence of common dental conditions globally, and in Nigeria.</p> <p>Have knowledge of social, cultural, environmental and other determinants of health or illness.</p> <p>Be able to administer oral hygiene instructions, professional fluoride therapy, fissure sealing, and ART</p> <p>Be able to educate patients concerning the aetiology and prevention of oral disease and encourage them to assume responsibility for their oral health.</p>	<p>Knowledge of the rationale and basis of public health, preventive dentistry, primary oral healthcare, and health promotion.</p> <p>Public health problems and priority oral diseases.</p> <p>The role of determinants of oral health in the oral health status of Nigeria.</p> <p>The basics of Quantitative methods and research (biostatistics, epidemiology).</p> <p>Oral health policy with emphasis on the Nigerian oral health policy.</p>	<p>Describe the state of oral health in Nigeria.</p> <p>Describe different levels and strategies of prevention for the major oral diseases.</p>	<p>Conducting health surveys</p> <p>Creating health posters</p> <p>Conducting health promotion for communities and individuals</p> <p>Provide the Basic Package of Oral Care in a Primary Healthcare setting.</p>

### COURSES CONTAINED

CODE	COURSE	COURSE CONTENT	LIST OF TOPICS	COURSE OUTCOMES
	Introduction to DPH, Epidemiology & Biostatistics	<p>Definition of Dental Public Health and related concepts; definition and description of oral health and disease conditions, as well as the factors affecting these states; activities</p> <p>Definition and difference between community and clinical health carried out in the field of community dentistry.</p> <p>Types of variables, frequency distribution, measures of central tendency and variance, sampling methods and error, probability, normal distribution, oral health indices.</p> <p>Definition &amp; Uses of Epidemiology; Global and local epidemiology of dental caries, periodontal diseases, oral cancer, malocclusion, and dental fluorosis.</p>	<ol style="list-style-type: none"> <li>1. Introduction to Public Health and Community Dentistry</li> <li>2. Introductory Epidemiology</li> <li>3. Basic Statistics</li> <li>4. Epidemiology of Dental Caries, Periodontal Disease and Oral Cancer.</li> <li>5. Measurement of Oral Diseases</li> <li>6. Sampling Techniques</li> </ol>	<p>Be able to discuss the discipline of Dental Public Health, including its definitions, principles and aims.</p> <p>Be able to explain the importance of the fields of Epidemiology and Biostatistics to DPH</p> <p>Be able to provide basic data on health states important to dentistry, including Caries, Periodontitis, Oral Cancer etc.</p>



	Prevention in Dentistry	Levels and strategies of prevention; Examples and uses of prevention; Prevention of caries (role of dental plaque; diet; nutrition and personal oral health; fluoride; fissure sealing); Prevention of periodontal diseases (methods of plaque control; common risk approach) Prevention of oral cancer, fluorosis Hazards of practice (Infection control, mercury and radiation protection etc).	<ol style="list-style-type: none"> <li>1. Levels, Scope and Uses &amp; Examples of Prevention</li> <li>2. Prevention of Oral Diseases - Oral Hygiene, Fluorides and other strategies</li> <li>3. Water Fluoridation – History, Legal and Social aspects</li> <li>4. Fluoride toxicity and de-fluoridation</li> <li>5. Hazards and their prevention in the dental practice.</li> </ol>	<p>Be able to define and discuss the concept of prevention in oral health, and its principles.</p> <p>Be able to link the concept of prevention to other concepts in DPH.</p> <p>Be able to apply the principles of prevention on health states important to dentistry, including Caries, Periodontitis, Oral Cancer etc.</p> <p>Be able to discuss the prevention of hazards in a dental practice.</p>
	Promotion & Education in Dentistry	Definition, concepts, principles and methods of Health promotion - Health Education, Advocacy and health protection; Steps involved in planning of oral health programs and their rationale; Understand smoking cessation as an example of health promotion for individuals; Education of Dentists – Scope, Challenges, and New concepts.	<ol style="list-style-type: none"> <li>1. Oral Health Promotion and Education</li> <li>2. Oral Health Planning</li> <li>3. Smoking Cessation</li> <li>4. Learning methods in Dental education</li> </ol>	<p>Be able to define and discuss the concept of oral health promotion, its components, and their principles.</p> <p>Be able to discuss the importance of, and apply both concepts to the improvement of population oral health.</p> <p>Know the rationale for dental education, and understand new concepts designed to foster life-long learning</p>
	Oral Health	The influence of behaviour on oral	1. Concept of needs and	Be able to discuss and apply

	Policy & Management	<p>health outcomes</p> <p>Role of different oral health organizations and cadres in healthcare delivery</p> <p>Rationale, components, and principles of primary health care; integration of oral care into general care and primary health care; and the Basic Package of Oral Care</p> <p>Global and Local Oral Health Policy</p> <p>The structure and financing of dental care</p> <p>The information explosion and new trends in healthcare provision</p>	<p>barriers to oral care</p> <ol style="list-style-type: none"> <li>2. Role of the behavioural sciences in Dentistry</li> <li>3. Models of health behaviour</li> <li>4. Primary health care approach in Dentistry and the Basic Package of Oral Care</li> <li>5. Oral Health Financing</li> <li>6. The Nigerian Oral Health Policy</li> <li>7. Health Service Organizations</li> <li>8. Oral Health manpower</li> <li>9. Dental informatics and tele-dentistry</li> </ol>	<p>various management and policy principles to the improvement of individual and population oral health.</p> <p>Be able discuss the inter-relationship between the health sector and other sectors of the economy.</p>
	Research Project	<p>Practical and sequential prosecution of research on a selected topic</p>	<ol style="list-style-type: none"> <li>1. Performing the literature search</li> <li>2. The concept note</li> <li>3. The Introduction</li> <li>4. Topic selection and framing</li> <li>5. Elucidating clear aims and objectives</li> <li>6. The Literature Review</li> <li>7. The Methodology</li> <li>8. Questionnaire development and data abstraction</li> <li>9. Analysis of data and presentation of Results</li> <li>10. The Discussion</li> </ol>	<p>Be able to access, assess and consume academic publications in Dentistry.</p> <p>Be able to perform, and defend a simple epidemiological study.</p>
	Clinical Primary Care provision	<p>Application of the concepts of prevention and promotion on oral care</p>	<p>Be able to describe the considerations in providing care in a PHC setting, including manpower, resource and socio-demographic</p>	

	<p>&amp; Practical oral health promotion</p>	<p>provision in a primary healthcare setting;          Practical oral health promotion to defined sub-groups, with emphasis on similarities and differences (children, pregnant women, non-literate individuals, immunocompromised states etc)          Apply basic quality improvement principles to oral care provision e.g. audits, caregiver evaluations etc.</p>	<p>considerations</p> <p>Be able to describe key differences in care organization and utilization in primary, secondary and tertiary oral care settings</p> <p>Be able to provide care in a PHC setting</p> <p>Apply Quality Improvement techniques to oral care provision in Primary, Secondary and Tertiary oral healthcare centers, including clinical auditing, process auditing, monitoring and evaluation of programs etc.</p> <p>Be able to provide practical oral health promotion using various methods to individuals, small groups and large groups in different settings, including schools, clinics, markets, and via television and radio.</p> <p>Develop public speaking capabilities that translate to oral health motivation for individuals and groups.</p> <p>Practice other forms of oral health promotion including utilization of academic and persuasive articles, power-point presentations, oral health posters etc.</p>
--	--	---	---

**SUBJECT – PERIODONTOLOGY (PDL)**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (25% contact time)	COMPREHENSION (25% contact time)	APPLICATION (50% contact time)
<p>Describe the biology of periodontium.            Explain the etiology and the different pathologies of periodontal tissues</p>	<p>Can list and describe the structure, function and roles of the different periodontal tissues.            Can discuss the role of disease organisms and host response in the</p>	<p>Knowledge of the structure and appearance of the periodontal tissues in health and disease.</p>	<p>Draw up a comprehensive periodontal treatment plan for a patient, with</p>	<p>Perform Manual Scaling and Polishing            Perform automated</p>

Understand, interpret and supply current indices for the assessment of periodontal diseases. Diagnose the different pathologies of periodontal tissues. Explain the different methods available for the prevention of periodontal pathologies. Carry out a detailed treatment for periodontal pathologies	<p>formation and progression of periodontal disease.</p> <p>Can discuss the different periodontal conditions available, and how they are related, or unrelated, to one another.</p> <p>Can describe periodontal indices for the assessment of periodontal diseases</p> <p>Can describe the levels and strategies of prevention available for the diseases of the periodontium.</p> <p>Can draw up a periodontal treatment plan, identify and describe indicated instruments and equipment, manage a simple periodontal case, and describe a complex periodontal procedure.</p>	<p>Knowledge of the various periodontal disease conditions, their causes, risk factors, and inter-relationships.</p> <p>Knowledge of the various means by which periodontal disease can be measured and managed.</p> <p>Knowledge of the various means by which periodontal disease can be prevented and managed.</p>	<p>considerations of age, systemic conditions, etc.</p> <p>Explain the dynamics between the roles of host immunity and bacterial organization in the formation and progression of periodontal disease.</p>	<p>Scaling and Polishing</p> <p>Perform simple operculectomy on an impacted lower third molar.</p>
---	--	---	--	--

### COURSES CONTAINED

CODE	COURSE	COURSE CONTENT	LIST OF TOPICS	COURSE OUTCOMES
	Introductory Periodontology	<p>Milestones in the development of the specialty of Periodontology, and current trends in the practice.</p> <p>Anatomical and embryological basis of the practice of Periodontology including the tissues of the periodontium, their related tissues, and how the jaws occlude with one another in a balanced manner.</p> <p>Influence of plaque and deposits on oral hygiene, including the means of measuring, and improving hygiene</p>	<ol style="list-style-type: none"> <li>1. Historical perspectives in Periodontology</li> <li>2. Periodontal anatomy and Physiology &amp; Pulpal-periodontal relationships</li> <li>3. Tooth Deposits</li> <li>4. Dental Stains</li> <li>5. Oral Hygiene methods and Products</li> <li>6. Oral Hygiene Indices</li> <li>7.</li> </ol>	<p>Be able to discuss the anatomy and physiology of the periodontium in health, including its relationship to other surrounding tissues and the occlusion.</p> <p>Be able to identify and discuss the similarities and peculiarities between different tooth deposits.</p> <p>Be able to identify and describe the different oral hygiene methods</p>

		through personal and professional means.	<p>principles of Occlusion and Occlusal problems</p> <p>8. Review of Clerkship, with focus on clerking a periodontal patient</p>	and materials, as well as their use. Be able to identify and describe the various oral hygiene indices in use.
	Periodontal Pathophysiology	<p>The aetiology and patho-physiology of plaque-induced and non-plaque induced diseases of the periodontium. Factors involved in the formation, progression or quiescence of periodontal disease, including local and systemic factors.</p> <p>Different classifications of periodontal disease, focusing on more recent and currently accepted classifications.</p> <p>The patho-physiology and clinical features of specific acute and chronic periodontal conditions.</p> <p>Means of measuring periodontal diseases and specific periodontal conditions.</p>	<ol style="list-style-type: none"> <li>1. etio-pathogenesis of Gingivitis and Periodontitis</li> <li>2. Immunology of Periodontal Disease</li> <li>3. Systemic factors and Periodontal disease</li> <li>4. Plaque-induced and Non-plaque induced gingival diseases</li> <li>5. Old and new classifications of Periodontitis</li> <li>6. Acute Periodontal lesions</li> <li>7. Periodontal enlargements</li> <li>8. Aggressive Periodontitis</li> <li>9. Gingival recession &amp; Dentine</li> </ol>	<p>Be able to discuss the anatomy of the periodontium in ill-health, and the patho-physiology and aetiology of the various broad groups of periodontal disease.</p> <p>Be able to describe currently used classifications of periodontitis.</p> <p>Be able to identify specific acute and chronic periodontal conditions, measurement using periodontal indices, and discuss their management.</p>

			<p>Hypersensitivity</p> <p>10. Periodontal-Endodontic Lesions</p> <p>11. Furcation involvements</p> <p>12. Periodontal and other indices</p>	
	Management of the Periodontal patient	<p>Signs and symptoms of conditions affecting the periodontium, and diagnosis of these conditions.</p> <p>The basics and important considerations in making the periodontal treatment plan.</p> <p>Simple periodontal treatment procedures and considerations in management, including chair and chair-side positioning, instrumentation.</p> <p>Chemotherapeutics used in periodontology.</p>	<ol style="list-style-type: none"> <li>1. Clinical features of gingivitis and periodontitis</li> <li>2. The periodontal treatment plan</li> <li>3. Principles of treatment of a simple case</li> <li>4. Simple periodontal instrumentation.</li> <li>5. Non-surgical periodontal procedures.</li> <li>6. Chair-side positioning for periodontal treatment.</li> <li>7. Periodontal chemotherapeutics</li> </ol>	<p>Be able to describe the signs and symptoms of gingivitis and periodontitis, and make diagnosis in the periodontology clinic.</p> <p>Be able to draw up a comprehensive treatment plan, and manage simple periodontal cases.</p> <p>Be able to perform simple periodontal treatment procedures.</p> <p>Be able to identify and discuss considerations in the use of different chemotherapeutic options in periodontology.</p>
	Surgical Periodontology	<p>Complex periodontal treatment procedures and the principles of periodontal surgery, including instrumentation.</p> <p>Flap techniques and regenerative methods used in periodontal disease management.</p>	<ol style="list-style-type: none"> <li>1. Complex periodontal treatment</li> <li>2. Principles of periodontal surgery &amp; Biologic Width</li> <li>3. Instrumentation</li> <li>4. Gingivectomy</li> <li>5. Flap techniques</li> </ol>	<p>Be able to list and describe various complex periodontal procedures, including the considerations involved.</p> <p>Be able to identify the instruments and materials used during and after periodontal surgical</p>

		<p>Materials used for surgical and post-surgical management of periodontal tissues.</p> <p>Occlusal traumatism and its management.</p> <p>Historical basis, considerations and current concepts in implantology.</p> <p>Surgical placement of the different types of implants, and management of the implant site.</p>	<p>6. Periodontal dressings</p> <p>7. Periodontal splints</p> <p>8. Periodontal regenerative therapy</p> <p>9. Occlusal trauma and Occlusal adjustments</p> <p>10. Implantology</p>	<p>procedures, their constituents, and their properties.</p> <p>Be able to describe the different means of achieving regeneration in periodontology.</p> <p>Be able to discuss the features and management of occlusal traumatism.</p> <p>Be able to discuss the types, uses, surgical procedure and management considerations in the use of implants.</p>
	Clinical Periodontology	<p>Infection control in Periodontology</p> <p>Skill acquisition in Periodontology</p> <p>Management of Periodontal patients</p>	<p>Be able to discuss the meaning, importance of, and the means by which Infection control can be achieved in the periodontology clinic in particular.</p> <p>Be able to perform basic prophylaxis on all kinds of patients.</p>	

**SUBJECT – CONSERVATIVE DENTISTRY (CON)**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (25% contact time)	COMPREHENSION (25% contact time)	APPLICATION (50% contact time)
Prepare the student for the acquisition of knowledge and skills necessary to operate a	The student should be able to 1. Be conversant with the gross anatomy and pulpal	The student should be familiar with	The student should comprehend and have translatory knowledge	The student should be able to 1. Orient and interpret common intra-oral radiographs

<p>modern dental practice independently from an operative, endodontic and advanced conservative restorative dental perspective</p>	<p>orientation of all teeth in the mouth</p> <ol style="list-style-type: none"> <li>2. Know the indication for and the techniques of all endodontic procedures</li> <li>3. Be conversant with the principles of occlusion and why this knowledge is important for planning fixed restorations</li> <li>4. Understand the principles guiding and be capable of performing simple extra-coronal tooth preparations</li> <li>5. Have an appreciation of the indications for surgical endodontic procedures</li> </ol>	<p>the knowledge base of all topics listed under the courses within the subject.</p>	<p>of at least the following</p> <ol style="list-style-type: none"> <li>1. Know the indications, techniques and methods for advanced conservative restorations</li> <li>2. Have a fair working knowledge of the restorative aspects of implantology</li> </ol>	<ol style="list-style-type: none"> <li>2. Perform a wide range of intra-coronal plastic and resin restorations</li> <li>3. Be able to prepare laboratory teeth for extra-coronal and advanced intra-coronal restorations</li> <li>4. Appreciate the laboratory procedures necessary for the production of advanced conservative restorations</li> <li>5. Be able to make impressions of prepared teeth for advanced restorations</li> <li>6. Be able to program a semi-adjustable articulator.</li> </ol>
--	--	--	--	---

### COURSES CONTAINED

Code	Course	Course content	List of topics	Course outcomes
	Theoretical basis of Endodontics	Treatment planning, case selection, and prognostication in endodontic therapy, including management of related conditions	<ol style="list-style-type: none"> <li>1. Review of Clerkship, with emphasis on clerking in the conservative clinic.</li> <li>2. Endodontic periodontal relationships</li> <li>3. Pulp capping.</li> <li>4. Basic principles of endodontics</li> </ol>	<p>Understand the anatomic and patho-physiologic rationale of endodontic treatment</p> <p>Appreciate the scope and methods of endodontic treatment</p>



			<ol style="list-style-type: none"> <li>5. Patient assessment, diagnosis and treatment planning in endodontics</li> <li>6. Root canal therapy – considerations and rationale.</li> <li>7. Management of traumatic dental injuries</li> <li>8. Management of discolored teeth</li> </ol>	Discuss the endodontic options for management of traumatized or discolored teeth.
	Endodontics	<p>Endodontic techniques, with focus on the different steps in Endodontics.</p> <p>Endodontic considerations for deciduous and immature permanent teeth.</p> <p>Restoration of endodontically treated teeth.</p> <p>Endodontic surgery.</p>	<ol style="list-style-type: none"> <li>1. Materials and Steps in Root Canal Treatment</li> <li>2. The Access Cavity</li> <li>3. Instrumentation</li> <li>4. Working length determination</li> <li>5. Obturation</li> <li>6. Restoration of endodontically treated teeth</li> <li>7. Endodontic surgery.</li> <li>8. Endodontic considerations for deciduous and immature permanent teeth</li> </ol>	<p>Understand the different types of access cavities for different types of teeth.</p> <p>Understand the role and methods of radiography in endodontic procedures</p> <p>Management of the endodontically treated tooth</p> <p>Appreciate the modifications to treatment when dealing with deciduous and immature permanent teeth</p>
	Theoretical basis of Advanced conservation	<p>diagnosis, risk assessment and management approaches.</p> <p>Principles of tooth preparation and minimum intervention dentistry, including</p> <p>Fundamentals of tooth preparation, pulp protection, enamel and dentin adhesion</p> <p>Designing cavities for various restorations</p>	<ol style="list-style-type: none"> <li>1. Principles of occlusion and articulation in fixed prosthodontic practice</li> <li>2. Complex cavities and restoration techniques</li> <li>3. The fixed partial denture</li> <li>4. The post and core restoration</li> <li>5. Resin-bonded bridges and fiber reinforced resin-bonded bridges</li> <li>6. Managing the patient with deranged occlusion</li> <li>7. Basic Implantology</li> </ol>	Rationale and basis for single and multiple fixed prosthodontics.
	Advanced conservation	Theory of clinical and laboratory techniques for	<ol style="list-style-type: none"> <li>1. Tooth preparation</li> <li>2. Impression making and moisture</li> </ol>	<ol style="list-style-type: none"> <li>1. Provide a theoretical framework for the fabrication</li> </ol>

		advanced restorations	<p>control</p> <ol style="list-style-type: none"> <li>3. The temporary restoration</li> <li>4. Preparation of working casts and dies</li> <li>5. Casting and causes of casting failure</li> <li>6. Cementation and post insertion management</li> </ol>	<p>of extra-coronal restorations</p> <ol style="list-style-type: none"> <li>2. Provide a cognitive background for the procedures and processes necessary in providing such restorations</li> <li>3. Appreciation of the concept of deranged occlusion and the procedures available for remedying same</li> <li>4. Introduce the restorative parts of implantology</li> </ol>
	Clinical conservative dentistry	Clinical demonstrations of steps in different restorative and endodontic treatments. Case presentations and patient management.	<ol style="list-style-type: none"> <li>1. Isolation and moisture control techniques</li> <li>2. Patient and operator positions</li> <li>3. Cross infection control</li> <li>4. Illumination and magnification</li> <li>5. Basic instrumentation</li> <li>6. Diagnosis of common dental, pulpal and peri-apical conditions</li> <li>7. Treatment of common dental, pulpal and peri-apical conditions</li> </ol>	
	Conservative practicals	Acquisition and improvement of manual skills for advanced conservation and endodontics	<p>The student should be able to perform the following independently on mannequins</p> <ol style="list-style-type: none"> <li>1. Tooth preparation for full jacket crowns</li> <li>2. Tooth preparation for inlays and onlays</li> <li>3. Impression techniques for advanced conservation work</li> <li>4. Programming a semi-adjustable articulator</li> </ol>	

**SUBJECT – PROSTHETIC DENTISTRY (PROS)**

**DESCRIPTION**

LEARNING OBJECTIVES	OUTCOME INDICES	DESIRED COMPETENCIES		
		KNOWLEDGE (25% contact time)	COMPREHENSION (25% contact time)	APPLICATION (50% contact time)
Inculcating principles and techniques that make the prescription and use of removable prosthesis possible. Understand removable metal framework partial denture design and fabrication Appreciation of the wider scope of removable prosthodontics	<ol style="list-style-type: none"> <li>1. Perform the clinical steps in partial denture prescription</li> <li>2. Troubleshoot when common problems associated with complete dentures arise</li> <li>3. Understand the close association between removable dentures and periodontal (and hence general) health</li> <li>4. Design and direct the technologist in the fabrication of metal based dentures</li> <li>5. Assess the quality of laboratory work by technologists on partial dentures he prescribes and make corrections where necessary</li> <li>6. Appreciate maxillary obturators and be capable of making minor adjustments to such prosthesis for patient comfort</li> <li>7. Design and fabricate simple occlusal splints.</li> </ol>	Familiar with the knowledge base of all topics listed under the courses within the subject.	<ol style="list-style-type: none"> <li>1. Steps necessary in complete denture fabrication</li> <li>2. Rationale and process of review appointments and troubleshooting minor problems with complete dentures</li> <li>3. Situations where complete denture patients may require referral to specialists</li> <li>4. The surveying and design process of metal framework partial dentures</li> <li>5. Understand the principles of retention, stability and support and techniques for achieving same</li> <li>6. Appreciate aesthetics in prosthetics and understand the need to respect the integrity of residual intra-oral tissues</li> </ol>	<p>The student should be able to</p> <ol style="list-style-type: none"> <li>1. Manage a complete denture patient</li> <li>2. Direct laboratory procedures involved in the fabrication of removable prosthesis</li> <li>3. Critique work done by laboratory staff</li> <li>4. Appreciate the role of material science in prosthodontics</li> <li>5. Design and fabricate simple oral appliances for pain syndromes of the oral region</li> <li>6. Make sound laboratory requests</li> </ol>

### COURSES CONTAINED

Code	Course	Course content	List of topics	Course outcomes
	Complete dentures	<p>Review of laboratory steps in the lost-wax technique of complete denture fabrication.</p> <p>Trouble-shooting of the damaged or defective complete denture.</p> <p>Management of the edentulous patient.</p>	<ol style="list-style-type: none"> <li>8. Review of prosthetic techniques</li> <li>9. Review of Clerkship, with emphasis on Clerking the Prosthodontic patient.</li> <li>10. The elderly edentulous patient</li> <li>11. Assessment of the complete denture patient</li> <li>12. Delivery and review appointments</li> <li>13. Repair, reline and rebase of complete dentures</li> <li>14. Difficult situations with complete dentures</li> <li>15. Implant supported complete dentures</li> <li>16. Overdentures</li> </ol>	<p>Seamlessly link the knowledge from prosthetic technique to the more clinically complex aspects of complete denture practice</p> <p>Acquisition of an understanding of the peculiarities of elderly patients who usually require complete dentures</p> <p>Knowledge of techniques for optimizing the fractured, worn or otherwise damaged complete dentures</p> <p>Knowledge of recent advances in complete denture prescription</p>
	Partial Dentures	<p>Appreciation of materials available and reasons for metal dentures</p> <p>Steps in the design and fabrication of metal-based partial dentures.</p>	<ol style="list-style-type: none"> <li>1. Introduction to partial dentures</li> <li>2. Classification of edentulous spaces</li> <li>3. Components of metallic denture frameworks</li> <li>4. Surveyors and surveying</li> <li>5. The design process</li> <li>6. Laboratory stages in partial denture fabrication</li> <li>7. Problems with denture classes</li> <li>8. Special partial dentures</li> </ol>	<p>Appreciate rationale for making denture frameworks from metal</p> <p>Know materials available for the fabrication of denture bases/frameworks</p> <p>Know effects of partial dentures on periodontal health</p> <p>Know components of a metal framework partial denture</p> <p>Know the design process and fabrication of metal framework partial dentures</p> <p>Appreciate the rationale for acrylic based partial dentures that are relatively healthy for the</p>

				periodontium
	Specialized prostheses and implants	Overview of maxillofacial prosthetics and challenges encountered in management of defects. Understanding of the fabrication of occlusal appliances.	1. Introduction to maxillofacial prostheses 2. Managing temporomandibular disorders 3. Implants in maxillofacial prosthetics	Provide a brief overview of maxillofacial prosthodontics and gnathology with information tailored towards an undergraduate level of training
	Clinical prosthodontics	Management of the prosthetic patient	9. Patient assessment 10. Impression procedures 11. Bite registration 12. Aesthetic try-in appointments 13. Delivery and post delivery care 14. Management of problems with different classes of dentures	
	Prosthodontics practicals	Acquisition and improvement of manual skills for prosthodontics	5. Fabrication of partial and complete acrylic complete and temporary partial dentures from impressions to review) 6. Use of Facebow and Articulators in transferring and mounting records 7. Surveying casts and designing metal frameworks (performed) 8. Casting of metal frameworks (observation) 9. Fabrication of maxillary obturators (observed) 10. Fabrication of occlusal appliances (observed) 11. Filling out of laboratory request forms	

## **SUBJECT – DENTAL PRACTICE MANAGEMENT (DPM)**

### **DPM 6200: Dental Practice Management**

#### **Course Description:**

Dental practice management refers to the administration and operation of a dental practice, such as planning, organization, and supervision of all aspects of the practice. This comprises managing staff, finances, marketing, patient relations, and compliance with industry regulations. Dental practice management aims to ensure the practice runs smoothly, is financially successful, and provides high-quality care to patients.

Effective practice management increases the efficiency, profitability, and the growth of practice. It also improves patient satisfaction and builds a positive reputation.

Dental Practice Management plays a crucial role in the success of dental practice. It ensures happy patients and increased revenue. For example, automatic scheduling and a powerful appointment system can greatly reduce patient wait times and improve overall satisfaction. Proper financial management can help you stay profitable and plan for future growth. And using the latest technology in dentistry can help you provide the best possible patient care.

Dental Practice Management is also about creating a positive and welcoming environment for patients and staff. By investing time in your practice's management, you can foster a culture of excellence and create a reputation for providing top-notch dental care. Evolving economic and socio-cultural factors have contributed to a broader range of dental practice models than in the past. With additional changes in the socio-cultural environment, legislations from the Medical and Dental Council, population shifts, reimbursement reductions, the digital era, and skyrocketing overhead costs, it is more important now (more than ever) that dental students understand the business side of dentistry. This course will provide Final Year Dental Students of the Bayero University, Kano, with a foundation of the principles of Dental Practice Management as a critical component of their dental education.

#### **II. Course Goals**

This course will be grounded on theories and practices of business management which will develop dental students' professional business skills, acumen and leadership. With the goal of producing well-rounded dental students with both clinical and business excellence, this course will better prepare dental students to become both clinicians and businessmen and women.

#### **III. Course Overview**

This course includes lectures, independent reading, team-based case study review, the use of in-class technologies, and assignments, to include:

- Construction of a Personal Debt Profile and Financial Plan
- Case Study Review of Laws & Legal Compliance in the Dental Practice
- Case Study Review of Medical and Dental Council of Nigeria Regulations in the Dental Practice
- Case Study Review of Employment Law in the Dental Practices
- Use of Zoom Meetings for Guest Speaker Presentations in Webinar Format
- Case Study Review of the Socio-cultural Determinants of the Purchase of Dental Care

#### **IV. Course Outline**

DPM 6200 is designed to create an engaging learning environment in which contemporary dental practice management foundational principles are taught through 15 fundamental areas. These 15 areas (listed below) will provide the necessary information for dental students to become more effective private practitioners and businessmen and women. This course presents 15 fundamental areas.

The 15 fundamental areas are:

1. Professional Identity & Reputation Management and Introduction to Dental Practice Management
2. Medical and Dental Council of Nigeria Practice Act, Laws & Rules and Medicolegal Issues
3. Dental Career Models & Legal Entity Choices
4. Occupational Health and Safety for Dentistry and Disaster Preparedness Planning and Risk Management and Compliance
5. Transition to Postgraduate and Private Practice and Practice Operations Guest Speaker Series
6. Dental Leadership and Strategic Planning
7. National Health Insurance Scheme & Practice Models
8. Buying, Building, or Renovating a Dental Practice
9. Working for an Established Practice
10. Dental Practice Marketing and Patient Acquisition
11. Human Resources & Staffing
12. Practice Financial Management & Operational Overhead
13. Employment Law for Dentists
14. Socio-Cultural Beliefs in the Practice of Dentistry
15. Technology and Data Management

## **V. Course Material**

Recommended Textbook

Business Basics for Dentists, by David O. Willis, Wiley-Blackwell Publishing, ISBN-13:

978-1-1182-6606-9/2013

LINK: <http://www.wiley.com/WileyCDA/WileyTitle/productCd-EHEP002770.html>

## **VI. Course Objectives**

The course objectives are designed to provide a foundation of business knowledge, acumen and leadership skills that will increase the dental student's education in a more comprehensive manner. Teaching dental students dental practice management from an academic, business-based curriculum should enable the graduating student to become a more confident, professional, decisive, and effective dental practitioner and potential business owner. While this is the main objective of this course, each of the 14 fundamental areas (see Course Outline) to be taught contain their own topic-specific objectives.

## **DPM 6200 Schedule**

### **Module 1: Professional Identity & Reputation Management and Introduction to Dental Practice Management**

#### **Objectives:**

1. Apply components, attributes & behaviors associated with Professional Identity through presented examples
2. Illustrate the impact of poor professionalism, self-marketing or self-branding on future goals & potential Associateship(s) through situational cases
3. Introduce concepts of individual competitive advantages and reputation management as it relates to a Professional Identity
4. Encourage the use of the technology tools (digital CV and LinkedIn), to enhance marketable individual professional profiles
5. Develop a positive Professional Identity through self-analysis, an illustration of individual strengths and competitive advantages highlighted in sample CV and a Cover Letter
6. Overview of the dental industry in Nigeria and the world over. Highlight the Importance of effective practice management

#### **Measurable Outcomes:**

There is no assignment for this Module.

Reading



## **Module 2. Medical and Dental Council of Nigeria Practice Act, Laws & Rules Lecture and Medicolegal Issues**

### **Objectives:**

1. Utilize the Laws, Rules, Statutes & Acts that apply to Dentists
2. Apply required Legal Compliance Standards Related to Dentistry to Dentists and Clinical Practicing
3. Discuss & incorporate the Minimum Standards for Dental Charts Into Clinical Practicing
4. Discuss & incorporate the Minimum Standard for Advertising
5. Discuss & incorporate the required Record Keeping dentists must keep on every patient into clinical practicing
6. Introduce the Governance Capability from the Board of Medical and Dental Council of Nigeria
7. Review Informed Consents for clinical practice
8. Comply with Delegable Duties for Dental Therapists and Dental Surgery Technicians (DSA)
9. Discuss leadership opportunities for the dentist in a healthcare team
10. Apply Principles of Risk Management to Clinical Practice to Mitigate Risks of Litigiousness
11. Medicolegal issues
  - Medical and Dental Ethics
  - Dental practice and our immediate environment

### **Measurable Outcomes:**

- Assignments (Summative Assessments)

## **Module 3: Dental Career Models & Legal Entity Choices Lecture**

### **Objectives:**

1. Compare and contrast career options available to dentists through different models and sectors of dentistry
2. Analyze the anticipated compensation packages associated with different career options
3. Discuss the option of individual incorporation for BDS students

Measurable Outcomes:

Reading: Business Basics for Dentists, Section 2, Ch. 6, Pg. 61-72, Ch. 11 Pg. 129-140 & Section 4, Ch.23-25, Pg. 353-378

#### **Module 4 - Occupational Health and Safety for Dentistry and Disaster Preparedness Planning and Risk Management and Compliance**

##### **Objectives:**

1. Recognize Legal Compliance to Occupational Safety and Health Standards, Requirements, Practices & Protocols. Review Post-Pandemic COVID-19 PPE and Infection Control alignment to current standards.
2. Differentiate the Roles & Responsibilities for Occupational Safety and Health Compliance as Dental Practice Employee vs Dentist Owner.
3. Correlate Occupational Safety and Health Compliance to Practice Safety, Patient Safety, and Financial Savings
4. Defend Safety Standards, Requirements, Practices & Protocols.
5. Risk Management and Compliance
  - Risk management and insurance
  - Regulatory compliance and accreditation

Measurable Outcomes: Assignment (Summative Assessment)

Reading:

Business Basics for Dentists, Section 2, Ch.8, Pg. 87-100, Section 3, Ch.22, Pg. 319-352 & Section 4, Ch.22, Pg. 319-352

#### **Module 5 - Transition to Postgraduate and Private Practice and Practice Operations Guest Speaker Series**

Practice Operations:

- Scheduling and appointment management
- Patient communication and customer service
- Office workflow and efficiency
- Supply chain management and inventory control

#### **Module 6 - Dental Leadership and Strategic Planning**

Objectives:

1. Correlate effective leadership with an engaged team through theoretical models and case examples.

2. Illustrate the impact of leadership styles, types, and traits through evidence-based studies and data.
3. Review communication strategies for team effectiveness.
4. Align dental leadership and communication strategies with positive patient experiences which lead to enhanced, large treatment case acceptance.
5. Correlate the above with practice financial viability and growth through experiential learning & evidence-based data.
6. Practice vision and mission statements
  - Goal setting and strategic planning
  - Leadership styles and communication

### **Module 7 – National Health Insurance & Practice Models**

Objectives:

1. Recommend insurance products available for individual dentists to purchase
2. Assess the cost estimation of choosing different types of individual insurance policies for a dentist
3. Compare and contrast the different contracting options for insurances to accept within a dental practice
4. Analyze the pros and cons of the reimbursement structure of each insurance type
5. Apply the reimbursement structure to the cash flow within a practice
6. Formulate an image of which insurance type correlates with what dental practice model

### **Module 8 - Buy, Build, Renovate or Start Up a Dental Practice**

Objectives:

1. Propose different opportunities for buying, building, renovating or starting up a dental practice through 4 presented options.
2. Quantify the cost estimation of varying practice purchase.
3. Increase the student's business & financial skills through the use of an MS Excel tool.

### **Module 10 - Dental Practice Marketing and Patient Acquisition**

Objectives:

1. Apply Marketing Principles Necessary for Successful Dental Practices
2. Construct Dental Practice's Marketing through the 5 P's of Marketing
3. Develop Strategies for Target Marketing to Primary, Secondary, & Tertiary Patient Markets
4. Marketing and Patient Acquisition
  - Practice branding and reputation management
  - Social media marketing and online presence
  - Patient retention and loyalty programs
  - Community outreach and public relations
5. Analyze Market & Patient Demographics for Best Practice Location & Potential Patient Base
6. Apply Marketing Strategies to Create Effective Marketing Plans
7. Synthesize the Information Presented to Best Fit BDS Students' Practice Preferences
8. Correlate Reputation Management with a Dental Practice's Goodwill

### **Module 11 - Human Resources & Staffing Lecture**

Objectives:

1. Apply the Documentation Needs with the Legal Requirements of the Human Resources Aspect of the Dental Practice by the Dentist as Employer
2. Illustrate a Salary Analysis-Market Review of Salaries & Benefits
3. Synthesize the HR & Staffing Needs with the BDS Students' & Dentists' Leadership Role in Managing Teams
4. Human Resources
  - Staff recruitment and training
  - Conflict resolution and team building
  - Employee benefits and compensation

### **Module 12 - Practice Financial Management & Operational Overhead**

Objectives:

1. Illustrate cash flow in a dental practice
2. Compare and contrast the differences between 3 types of practice Financial Statements
3. Analyze dental practice's financial health through Financial Statement analysis
4. Evaluate successful dental software key indicators in a dental practice
5. Synthesize the financial statements to the practice's dental software outcomes

6. Determine healthy %'s of practice overhead based on industry benchmarks
7. Review the impact of overhead %'s on dentists' compensation
8. Financial Management:

- Billing procedures
- Health maintenance organization (HMO) claims procedures
- Budgeting and financial planning
- Profit and loss statement analysis

### **Module 13 - Employment Law: Dentists as Employers Lecture**

Objectives:

1. Apply Employment Laws into the Practice for Dentist Employers
2. Discuss minimization of Risk of Audit or Lawsuit for Dentist Employers
3. Compare the Rights of Dentists as Employees in Associateships
4. Contrast the Above with the Responsibilities of Dentists as Employers

### **Module 14 - Socio-Cultural Beliefs in the Practice of Dentistry**

#### **Module 15 – Technology and Data Management**

- Practice management software and systems
- Data analysis and reporting
- Cybersecurity and data protection

### **Course Evaluation**

This course is non-examinable, but a requirement for graduation.

Throughout the course, Final Year BDS Students will be expected to complete assignments, essays, research projects, presentations, and practical learning sessions to meet the requirements of the course.

**Course outline for all courses taught for the last three (3) years in the Programme/Sub-Discipline/Discipline:**

**Course Outlines**

*Below is a summary of courses.*

*For details including learning objectives and desired competencies see attached curriculum.*

**Course Outlines**

**200 Level**

**1<sup>ST</sup> SEMESTER LIST OF COURSES.**

<b>COURSE CODE</b>	<b>COURSE</b>	<b>CREDIT UNIT</b>
ANA 2301	Intro. Anatomy & Gross Anatomy of Upper & Lower Limbs	3
ANA 2103	Histology of Basic Tissues	1
ANA 2205	General Embryology	2
ANA 2407	Practical Work	4
PHS 2201	Introductory Physiology and the Autonomic Nervous System	2
PHS 2203	Haematology	2
PHS 2205	The Cardiovascular system	2
BCH 2101	Cell Biology ,PH and Buffer	1
BCH 2203	Carbohydrate Chemistry	2
BCH 2105	Amino acids chemistry	1
BCH 2207	Biochemistry Practical I	2
BCH 2109	Lipid Metabolism	1
PSY 2201	Introduction to Psychology I	2
PSY 2103	Introduction to Psychology II & Health Psychology	1

**2<sup>ND</sup> SEMESTER LIST OF COURSES.**

<b>COURSE CODE</b>	<b>COURSE</b>	<b>CREDIT UNIT</b>
ANA 2402	Gross Anatomy of Thorax, Abdomen, Pelvis & Perineum	4
ANA 2302	Systematic Histology (Organology)	3
ANA 2106	Systematic Embryology (Organogenesis)	1
ANA 2208	Practical Work	2
PHS 2302	Renal Physiology, Body Fluids and Temperature Regulation	3
PHS 2204	Respiratory system	2
PHS 2206	Neuroscience I	2
BCH 2202	Nucleic acids chemistry	2
BCH 2104	Enzymes, Coenzymes and Bioenergetics	1
BCH 2106	Amino Acids Metabolism	1
BCH 2208	Carbohydrates Metabolisms	2
BCH 2110	Biochemistry Practical II	1

**300 LEVEL**

**1ST SEMESTER LIST OF COURSES.**

<b>COURSE CODE</b>	<b>COURSE</b>	<b>CREDIT UNIT</b>
ANA 3401	Gross Anatomy of Head & Neck and Neuro-anatomy	4
ANA 3203	Histology of Special Senses and Neuro-histology/Histo-chemistry	2
ANA 3105	Neuro-embryology & Development of Pharyngeal Apparatus	1
ANA 3207	Human Genetics	2
ANA3309	Laboratory Techniques for Light Microscope/Gross Radiologic Techniques	3

ANA 3352	Practical Work	3
PHS 3201	Gastrointestinal Physiology	2
PHS 3203	Endocrinology and Reproduction	2
PHS 3205	Pathophysiology I	2
PHS3207	Laboratory Teaching and Instrumentation	2
PHS 3209	Neuroendocrinology	2
PHS 3211	Pathophysiology II	2
BCH 3201	Metabolism of nucleic acid and protein synthesis	2
BCH 3103	Integration of Metabolism	1
BCH 3205	Nutrition	2
BCH 3207	Biochemical Genetics and Molecular Biology	2
BCH 3209	Special Topics	2

**300 LEVEL  
2<sup>ND</sup> SEMESTER CORE COURSES.**

<b>COURSE CODE</b>	<b>COURSE</b>	<b>CREDIT UNIT</b>
PAT 3402	General Pathology I	4
PAT 3404	General Pathology II	4
PCL 3302	Introductory Pharmacology	3
PCL 3304	Autonomic Pharmacology	3
PCL 3306	Cardiovascular Pharmacology	3
MIC 3302	Introductory Microbiology & General Bacteriology	3
MIC 3204	General Parasitology	2
MIC 3206	General Virology	2
MIC 3208	General Mycology	2
CPY 3302	Introduction to Chemical Pathology	3
CPY 3204	Immunology	2
CPY 3306	Clinical Chemistry of Disease I	3
HEM 3302	General Haematology I: Introduction	3



**400 LEVEL  
1<sup>ST</sup> SEMESTER CORE COURSES.**

<b>COURSE CODE</b>	<b>COURSE</b>	<b>CREDIT UNIT</b>
PAT 4401	Systemic Pathology I	4
PAT 4203	Pathology Practical	2
PCL 4201	GIT Pharmacology	2
PCL 4203	Respiratory Pharmacology	2
PCL 4205	Clinical Pharmacology	2
MIC 4201	Medical Bacteriology	2
MIC 4203	Medical Mycology	2
MIC 4105	Medical Parasitology	1
MIC 4207	Applied Medical Microbiology	2
CPY 4301	Clinical Chemistry of Disease II	3
CPY 4303	Analytical Procedures and Practicals	3
HEM 4401	General Haematology II: Anaemias	4
HEM 4303	Haemato-Oncology and Bleeding Disorders	3

**400 LEVEL  
2<sup>ND</sup> SEMESTER CORE COURSES.**

<b>COURSE CODE</b>	<b>COURSE</b>	<b>CREDIT UNIT</b>
PAT 4402	Systemic Pathology II	4
PAT 4204	Forensic Pathology	2
PCL 4202	Clinical Toxicology	2
PCL 4304	Central Nervous System Pharmacology	3
PCL 4306	Endocrine Pharmacology	3
PCL 4208	Chemotherapy	2
MIC 4202	Medical Virology	2
MIC 4104	Medical Entomology	1

MIC 4206	Medical Protozoology	2
MIC 4208	Medical Helminthology	2
MIC 4110	Microbial Genetics	1
CPY 4302	Clinical Nutrition & Nutritional Support	3
CPY 4204	Clinical Enzymology	2
HEM 4302	Blood Transfusion and Transplantation	3
HEM 4204	Practical & Interpretative Haematology	2

#### 400 LEVEL 1<sup>st</sup> SEMESTER

<b>COURSE CODE</b>	<b>COURSE</b>	<b>CREDIT UNIT</b>
<b>MEDICINE I</b>		
MED 4201	Introduction to Clinical Medicine I	2
MED 4203	Introduction to Clinical Medicine II	2
4MED 4205	Cardiology I	2
MED 4207	Nephrology I	2
MED 4409	Clinics Teaching	4
MED 4511	Ward round & Bed Side Teaching	5
MED 4413	Call Duty Teaching	4
<b>MEDICINE II</b>		
MED 4202	Respiratory Medicine I	2
MED 4204	Gastroenterology	2
MED 4206	Infectious Diseases	2
MED 4408	Clinics Teaching	4
MED 4510	Ward round & Bed Side Teaching	5
MED 4412	Call Duty Teaching	4
<b>SURGERY I</b>		
SUG 4501	General Surgery I	5
SUG 4203	Paediatric Surgery	2
SUG 4305	Clinics Teaching	3
SUG 4307	Theatre Teaching	3
SUG 4309	Ward round & Bed Side Teaching	4

SUG 4322	Call Duty Teaching	3
<b>SURGERY II</b>		
SUG 4502	General Surgery II	5
SUG 4204	Urology	2
SUG 4306	Clinics Teaching	3
SUG 4308	Theatre Teaching	3
SUG 4310	Ward round & Bed Side Teaching	4
SUG 4312	Call Duty Teaching	3

## COURSES IN DENTISTRY

### 400 LEVEL 2<sup>ND</sup> SEMESTER

COURSE	CODE	CREDIT UNIT
Dental Morphology I	DMP 4202	2
Dental Morphology II	DMP 4234	2
Oral Biology I	ORB 4232	2
Oral Biology II	ORB 4322	3
Dental Operative Technique I	OPT 4101	1
Dental Operative Technique II	OPT 4402	4
Prosthetic Technique I	PRT 4104	1
Prosthetic Technique II	PRT 4402	4
Science of Dental Materials I	SDM 4202	2
Science of Dental Materials II	SDM 4402	4

### 500 LEVEL 1<sup>ST</sup> SEMESTER

COURSE	CODE	CREDIT UNIT
Dental Radiography/ Radiology I	MFR 5421	4
Oral Medicine & Dental Therapeutics I	ORM 5321	3

Oral Pathology I	ORP 5421	4
Paediatric Dentistry I	PED 5301	3
Paediatric Dentistry II	PED 5401	4
Orthodontics I	ORT 5201	2
Orthodontics II	ORT 5401	4

### 500 LEVEL 2<sup>ND</sup> SEMESTER

COURSE	CODE	CREDIT UNIT
Orthodontics III	ORT 5402	4
Paediatric Dentistry III	PED 5402	4
Dental Radiography/ Radiology II	MFR 5242	2
Dental Radiography/ Radiology III	MFR 5432	4
Oral Medicine & Dental Therapeutics II	ORM 5142	1
Oral Medicine & Dental Therapeutics III	ORM 5232	2
Oral Pathology II	ORP 5242	2
Oral Pathology III	ORP 5432	4

### 600 LEVEL 1<sup>ST</sup> SEMESTER

COURSE	CODE	CREDIT UNIT
Conservative Dentistry I	CON 6103	1
Endodontics	CON 6401	4
Prosthetic Dentistry I	PRO 6103	1
Prosthetic Dentistry II	PRO 6401	4
Oral & Maxillofacial Surgery I	OMS 6205	2
Oral & Maxillofacial Surgery II	OMS 6207	2
Dental Public Health I	DPH 6401	4
Dental Public Health II	DPH 6105	1

Periodontology I	PER 6401	4
Periodontology II	PER 6105	1
Dental Practice Management	DPM 6200	2

### 600 LEVEL 2<sup>ND</sup> SEMESTER

COURSE	CODE	CREDIT UNIT
Dental Public Health	DPH 6202	2
Dental Public Health	DPH 6402	4
Periodontology	PER 6102	1
Periodontology	PER 6402	4
Advanced Conservative Dentistry	CON 6104	1
Advanced Conservative Dentistry	CON 6402	4
Prosthetic Dentistry III	PRO 6104	1
Prosthetic Dentistry IV	PRO 6402	4
Local Anaesthesia	OMS 6104	1
Oral & Maxillofacial Surgery	OMS 6106	1
Oral & Maxillofacial Surgery	OMS 6202	2
Dental Practice Management	DPM 6200	2

**Table 1: Program/Sub-Discipline/Discipline Workload by students**

200 LEVEL						
1STSEMESTER		LECTURE HOURS/WEEK		TOTAL WEEK LOAD		
COURSE CODE	COURSE	LECT	TUT	PRACTICAL	TOTAL CREDIT UNIT	TOTAL CONTACT HOURS
ANA 2301	Intro. Anatomy & Gross Anatomy of Upper & Lower Limbs	2	1	3	3	48
ANA 2103	Histology of Basic Tissues	1	1	1		16
ANA 2205	General Embryology	2	2	2		32
ANA 2407	Practical Work	12	12	4		192
PHS 2201	Introductory Physiology and the Autonomic Nervous System	2	2	2		32
PHS 2203	Haematology	2	2	2		32
PHS 2205	The Cardiovascular system	2	2	2		32
BCH 2101	Cell Biology ,PH and Buffer	1	1	1		16
BCH 2203	Carbohydrate Chemistry	2	2	2		32
BCH 2105	Amino acids chemistry	1	1	1		16
BCH 2207	Biochemistry Practical I	6	6	2		96
BCH 2109	Lipid Metabolism	1	1	1		16
PSY 2201	Introduction to Psychology I	2	2	2		32
PSY 2103	Introduction to Psychology II & Health Psychology	1	1	1		16
200 LEVEL						
2NDSEMESTER		LECTURE HOURS/WEEK		TOTAL WEEK LOAD		
COURSE CODE	COURSE	LECT	TUT	PRACTICAL	TOTAL CREDIT UNIT	TOTAL CONTACT HOURS
ANA 2402	Gross Anatomy of Thorax, Abdomen, Pelvis & Perineum	3	1	4	4	64
ANA 2302	Systematic Histology (Organology)	2	1	3	3	48
ANA 2106	Systematic Embryology (Organogenesis)	1	1	1		16
ANA 2208	Practical Work	6	6	2		96
PHS 2302	Renal Physiology, Body Fluids and Temperature Regulation	2	1	3	3	48
PHS 2204	Respiratory system	2	2	2		32
PHS 2206	Neuroscience I	2	2	2		32
BCH 2202	Nucleic acids chemistry	2	2	2		32
BCH 2104	Enzymes, Coenzymes and Bioenergetics	1	1	1		16
BCH 2106	Amino Acids Metabolism	1	1	1		16
BCH 2208	Carbohydrates Metabolisms	2	2	2		32
BCH 2110	Biochemistry Practical II	3	3	1		48
300 LEVEL						
1STSEMESTER		LECTURE HOURS/WEEK		TOTAL WEEK LOAD		
COURSE CODE	COURSE	LECT	TUT	PRACTICAL	TOTAL CREDIT UNIT	TOTAL CONTACT HOURS
ANA 3401	Gross Anatomy of Head & Neck and Neuro-anatomy	3	1	4	4	64
ANA 3203	Histology of Special Senses and Neuro-histology/Histo-chemistry	2	2	2		32
ANA 3105	Neuro-embryology & Development of Pharyngeal Apparatus	1	1	1		16
ANA 3207	Human Genetics	2	2	2		32
ANA3309	Laboratory Techniques for Light Microscope/Gross Radiologic Techniques	1	6	7	3	112
ANA 3352	Practical Work	9	9	3		144
PHS 3201	Gastrointestinal Physiology	2	2	2		32
PHS 3203	Endocrinology and Reproduction	2	2	2		32
PHS 3205	Pathophysiology I	2	2	2		32
PHS3207	Laboratory Teaching and Instrumentation	6	6	2		96

PHS 3209	Neuroendocrinology	2	2	2		32
PHS 3211	Pathophysiology II	2	2	2		32
BCH 3201	Metabolism of nucleic acid and protein synthesis	2	2	2		32
BCH 3103	Integration of Metabolism	1	1	1		16
BCH 3205	Nutrition	2	2	2		32
BCH 3207	Biochemical Genetics and Molecular Biology	2	2	2		32
BCH 3209	Special Topics	2	2	2		32
300 LEVEL						
2ndSEMESTER		LECTURE HOURS/WEEK TOTAL WEEK LOAD		TOTAL WEEK LOAD		
COURSE CODE	COURSE	LECTURE	TUTORIAL	PRACTICAL	TOTAL CREDIT UNIT	TOTAL CONTACT HOURS
PAT 3402	General Pathology I	3	1	4	4	64
PAT 3404	General Pathology II	3	1	4	4	64
PCL 3302	Introductory Pharmacology	3	3	3		48
PCL 3304	Autonomic Pharmacology	2	1	3	3	48
PCL 3306	Cardiovascular Pharmacology	3	3	3		48
MIC 3302	Introductory Microbiology & General Bacteriology	2	1	3	3	48
MIC 3204	General Parasitology	2	2	2		32
MIC 3206	General Virology	2	2	2		32
MIC 3208	General Mycology	2	1	3	3	48
CPY 3302	Introduction to Chemical Pathology	2	1	3	3	48
CPY 3204	Immunology	2	2	2		32
CPY 3306	Clinical Chemistry of Disease I	3	3	3		48
HEM 3302	General Haematology I: Introduction	3	3	3		48
COMM 2302	Descriptive Statistics	3	3	3		48
COMM 3304	Inferential statistics	3	3	3		48
COMM 3306	Introduction to General Epidemiology	3	3	3		48
COMM 3308	Principles of Infectious disease Epidemiology	2	1	3	3	48
COMM 3310	Introduction to Demography and Vital Statistics	2	1	3	3	48
COMM 3312	History of Medicine	3	3	3		48
COMM 3314	Introduction to Environmental Health	3	3	3		48
COMM 3316	Introduction to Primary Health Care	3	3	3		48
COMM 3318	Community Diagnosis	9	9	3		144
COMM 3320	Field Posting	9	9	3		144
400 LEVEL						
LECTURE HOURS/WEEK TOTAL WEEK LOAD			TOTAL WEEK LOAD			
COURSE CODE	COURSE	LECTURE	TUTORIAL	PRACTICAL	TOTAL CREDIT UNIT	TOTAL CONTACT HOURS
PAT 4401	Systemic Pathology I	3	1	4	4	64
PAT 4203	Pathology Practical	6	6	2		96
PCL 4201	GIT Pharmacology	2	2	2		32
PCL 4203	Respiratory Pharmacology	2	2	2		32
PCL 4205	Clinical Pharmacology	2	2	2		32
MIC 4201	Medical Bacteriology	2	2	2		32
MIC 4203	Medical Mycology	2	2	2		32
MIC 4105	Medical Parasitology	1	1	1		16
MIC 4207	Applied Medical Microbiology	1	3	4	2	64
CPY 4301	Clinical Chemistry of Disease II	3	3	3		48
CPY 4303	Analytical Procedures and Practicals	3	6	9	3	144
HEM 4401	General Haematology II: Anaemias	3	1	4	4	64
HEM 4303	Haemato-Oncology and Bleeding Disorders	2	1	3	3	48
COMM 4401	Maternal and child health	3	1	4	4	64
COMM 4303	Environmental Health Practice	2	1	3	3	48
COMM 4305	Epidemiology and Control of communicable and non-communicable Diseases	2	1	3	3	48
COMM 4307	Occupational health	3	3	3		48
SUG 4051	General Surgery I	5	5	5		80
SUG 4203	Paediatric Surgery	2	2	2		32
SUG 4305, 4307 4309, 4312	Clinics, theatre and Call Duty bed side teaching I	4	27	31	13	496
MED 4201	Introduction to Clinical Medicine I	2	2	2		32

MED 4203	Introduction to Clinical Medicine II	2	2	2		32
4MED 4205	Cardiology I	2	2	2		32
MED 4207	Nephrology I	2	2	2		32
MED 4409, 4511, 4413,	Clinics, theatre and Call Duty bed side teaching I	4	27	31	13	496
<b>400 LEVEL</b>						
<b>LECTURE HOURS/WEEK</b>		<b>TOTAL WEEK LOAD</b>				
<b>COURSE CODE</b>	<b>COURSE</b>	<b>LECTURE</b>	<b>TUTORIAL</b>	<b>PRACTICAL</b>	<b>TOTAL CREDIT UNIT</b>	<b>TOTAL CONTACT HOURS</b>
PAT 4402	Systemic Pathology II	3	1	4	4	64
PAT 4204	Forensic Pathology	2	2	2		32
PCL 4202	Clinical Toxicology	2	2	2		32
PCL 4304	Central Nervous System Pharmacology	2	1	3	3	48
PCL 4306	Endocrine Pharmacology	2	1	3	3	48
PCL 4208	Chemotherapy	2	2	2		32
MIC 4202	Medical Virology	2	2	2		32
MIC 4104	Medical Entomology	1	1	1		16
MIC 4206	Medical Protozoology	2	2	2		32
MIC 4208	Medical Helminthology	2	2	2		32
MIC 4110	Microbial Genetics	1	1	1		16
CPY 4302	Clinical Nutrition & Nutritional Support	2	1	3	3	48
CPY 4204	Clinical Enzymology	2	2	2		24
HEM 4302	Blood Transfusion and Transplantation	2	1	3	3	48
HEM 4204	Practical & Interpretative Haematology	6	6	2		96
SUG 4502	General Surgery II	5	5	5		80
SUG 4204	Urology	2	2	2		32
SUG 4306, 4308, 4310, 4312	Clinics, theatre and Call Duty bed side teaching II	12	27	39	13	468
MED 4202	Respiratory Medicine I	2	2	2		24
MED 4204	Gastroenterology	2	2	2		24
MED 4206	Infectious Diseases	2	2	2		24
MED 4408, 4510, 4412	Clinics, theatre and Call Duty bed side teaching II	4	27	31	13	496
<b>500 LEVEL</b>						
<b>LECTURE HOURS/WEEK</b>		<b>TOTAL WEEK LOAD</b>				
<b>COURSE CODE</b>	<b>COURSE</b>	<b>LECTURE</b>	<b>TUTORIAL</b>	<b>PRACTICAL</b>	<b>TOTAL CREDIT UNIT</b>	<b>TOTAL CONTACT HOUR</b>

#### 400 level 2<sup>nd</sup> semester

Grouping	Course No/Level	Course/Subject	Pre-requisite	Contact Hours/Week		
				Lecture	Tutorial	Practical
(b) Core/Compulsory Courses	DMP420 2	Dental morphology I	YES	2	1	-
	DMP423 4	Dental morphology II	YES	-	1	6
	ORB4232	Oral biology I	YES	-	1	6
	ORB4322	Oral biology II	YES	3	1	-
	OPT4101	Dental operative techniques I	YES	-	1	3



	OPT4402	Dental operative techniques II	YES	4	1	-
	PRT4104	Prosthetic technique I	YES	-	1	3
	PRT4402	Prosthetic technique II	YES	4	1	-
	SDM420 2	Science of dental materials I	YES	2	1	-
	SDM440 2	Science of dental materials II	YES	4	1	-

500 level 1<sup>st</sup> semester

Grouping	Course No/Level	Course/Subject	Pre-requisite	Contact Hours/Week		
				Lecture	Tutorial	Practical
(b) Core/Compulsory Courses	MFR 5421	Dental Radiography/ Radiology I	YES	4	-	-
	ORM 5321	Oral Medicine & Dental Therapeutics I	YES	3	1	-
	ORP 5421	Oral Pathology I	YES	4	1	-
	PED 5301	Paediatric Dentistry II	YES	-	1	9
	PED 5401	Paediatric Dentistry I	YES	4	1	-
	ORT 5201	Orthodontics II	YES	-	1	6
	ORT 5401	Orthodontics I	YES	4	1	-

500 level 1<sup>st</sup> semester

Grouping	Course No/Level	Course/Subject	Pre-requisite	Contact Hours/Week		
				Lecture	Tutorial	Practical
(b) Core/Compulsory Courses	ORT 5402	Orthodontics	YES	4	1	-
	PED 5402	Paediatric Dentistry	YES	4	1	-
	MFR 5242	Dental Radiography/ Radiology	YES	-	-	6
	MFR 5432	Dental Radiography/ Radiology	YES	4	1	-
	ORM 5142	Oral Medicine & Dental Therapeutics	YES	-	1	3

	ORM 5232	Oral Medicine & Dental Therapeutics	YES	2	1	-
	ORP 5242	Oral Pathology	YES	-	1	6
	ORP 5242	Oral Pathology	YES	2	1	-

#### 600 LEVEL 2<sup>ND</sup> SEMESTER

Grouping	Course No/Level	Course/Subject	Pre-requisite	Contact Hours/Week		
				Lecture	Tutorial	Practical
(b) Core/Compulsory Courses	CON 6103	Conservative Dentistry	YES	-	1	3
	CON6401	Conservative Dentistry	YES	4	1	-
	PRO 6103	Prosthetic Dentistry	YES	-	1	3
	PRO 6401	Prosthetic Dentistry	YES	4	1	-
	OMS 6205	Oral & Maxillofacial Surgery	YES	2	1	-
	OMS 6207	Oral & Maxillofacial Surgery	YES	2	1	-
	OMS 6105	Oral & Maxillofacial Surgery	YES	-	1	3
	DPH 6401	Dental Public Health	YES	4	1	-
	DPH 6103	Dental Public Health	YES	-	1	3
	PER 6401	Periodontology	YES	4	1	-
	PER 6103	Periodontology	YES	-	1	3
	DPM 6200	Dental Practice Management	YES	2		

#### 600 LEVEL 2<sup>ND</sup> SEMESTER

Grouping	Course No/Level	Course/Subject	Pre-requisite	Contact Hours/Week		
				Lecture	Tutorial	Practical
(b) Core/Compulsory Courses	DPH 6102	Dental Public Health	YES	-	1	3
	DPH 6402	Dental Public Health	YES	4	1	-
	PER 6102	Periodontology	YES	-	1	3
	PER 6402	Periodontology	YES	4	1	-
	CON 6104	Conservative Dentistry	YES	-	1	3
	CON 6402	Conservative	YES	4	1	-

		Dentistry				
	PRO 6104	Prosthetic Dentistry	YES	-	1	3
	PRO 6402	Prosthetic Dentistry	YES	4	1	-
	OMS 6204	Local Anaesthesia	YES	2	1	-
	OMS 6106	Oral & Maxillofacial Surgery	YES	-	1	3
	OMS 6202	Oral & Maxillofacial Surgery	YES	2	1	-
	DPM 6200	Dental Practice Management	YES	2	1	2