



DENTAL COLLEGE HITEC-IMS
Study Guide Y4 - T3 - D26
Term 3
Final Year BDS
Coordinator: Prof. Aamir Rafiq

NUMS Vision

The vision of the National University of Medical Sciences is to improve the quality of life through education, research, innovation, and healthcare, thereby contributing to endeavors to make Pakistan and this world a better place to live in.

Institutional Vision

Leading advancement in Oral & Dental health through excellence
in education, patient care and research

Institutional Mission

To serve the local and global communities by producing competent, ethical, socially responsible, research oriented and lifelong learning oral health care professionals



PROGRAM OUTCOMES

Code	Outcome Statement (Graduate will be able to...)	Keywords
PO1	Manage common oral diseases using safe and evidence-based practices.	Diagnosis · Treatment · Safety
PO2	Identify patients requiring referral for specialized oral and dental treatment.	Triage · Scope of Practice · Networks
PO3	Advocate preventive measures against common oral and dental disease.	Prevention · Risk Reduction · Health Promotion
PO4	Demonstrate professional, ethical, and culturally appropriate behavior.	Ethics · Altruism · Cultural Sensitivity
PO5	Engage in lifelong learning for continuous professional development.	CPD · Reflective Practice · Growth
PO6	Demonstrate effective verbal and written communication skills.	Counselling · Documentation · Clarity
PO7	Demonstrate basic skills to conduct research on common oral and dental issues.	Research Literacy · Audit · Inquiry
PO8	Work in healthcare teams and provide leadership when required.	Teamwork · Leadership · Collaboration



Curricular organization of the BDS program

BDS Year 1 (Integrated)	BDS Year 2 (Integrated)	BDS Year 3	BDS Year 4
SUBJECTS			
Anatomy Physiology Biochemistry Oral Biology	Community Dentistry Dental Materials General Pathology Pharmacology Preclinical Operative Dentistry Preclinical Prosthodontics	General Surgery General Medicine Periodontology Oral Medicine Oral Pathology Oral & Maxillofacial Surgery Operative dentistry Prosthodontics	Operative Dentistry & Endodontics Pediatric Dentistry Prosthodontics Oral & Maxillofacial Surgery Orthodontics
Pakistan Studies and Islamiat Fahimul Quran			
Clinical Photography Videography, Expository Writing	EOTO ICT		
LONGITUDINAL THREAD			
		Patient Safety/Digital Dentistry	
Professional communication			
Behavioral Sciences			
Research/ICT			

Introduction to the Study Guide:

Dear Students,

This study guide has been developed and updated by the faculty and the Department of Dental Education HITEC-IMS especially for you. This booklet is an aid to:

- Inform you about this part of curriculum and its organization.
- Help you organize and manage your studies throughout the module.
- Guide you on assessment methods, rules and regulations.
- Communicate information on management of the module. This will help you to contact the right person in case of any difficulty.
- Define the objectives which are expected to be achieved at the end of the module.
- Identify the learning strategies such as lectures, small group discussions, clinical skills, demonstrations, tutorials and case-based learning activities that will be implemented to achieve the module objectives.
- Provide a list of learning resources such as books, and journals for students to consult in order to maximize their learning.

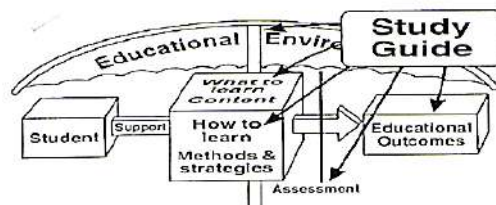


Figure 1. Objectives of the study Guide (HARDEN, J.M. LAIDLAW, E.A. HESKETH, 1999)



Term Committee



Block Coordinator: Prof. Aamir Rafiq

Head of Department, Prosthodontics. Email ID: aamirrafiq.dental@hitec-ims.edu.pk

S.No.	Name	Designation	Departments	Email.ID
1.	Prof. Dr. Waheed Ullah Khan	Vice Principal / Professor / Dean Clinical Sciences / HoD	Orthodontics	waheedullah.dental@hitec-ims.edu.pk
2.	Prof. Dr. Beenish Qureshi	Professor / HoD	Operative Dentistry	beenishqureshi.dental@hitec-ims.edu.pk
3.	Dr. Aamir Rafiq	Professor / HoD	Prosthodontics	aamirrafiq.dental@hitec-ims.edu.pk
4.	Dr Amna Riaz	Associate Professor / HoD	Pediatric Dentistry	amnariaz.dental@hitec-ims.edu.pk
5.	Dr. Maimoona Siddiq	Associate Professor / HoD	OMFS	maimoonasiddique.dental@hitec-ims.edu.pk
6.	Dr. Faizan Munir	Assistant Professor / HoD Dental Education	Dental Education	faizanmunirkhan.dental@hitec-ims.edu.pk
7.	Tayyab Nadeem	CR	Final Year	sheikhtayyabnadeem@gmail.com
8.	Marium Zafar	GR	Final Year	marriamrana41@gmail.com

Blocks Organization BDS Year 4

CLASS OF 2026 (YEAR 4)																																																	
Year Coordinator: Prof. Dr. Beenish Qureshi																																																	
February		March			April			May		June		July		August		September			October		November	December			January		February																						
9th	10th	15th	16th-18rd	24th	12th	13th-19th	20th	17th	18th-24th	25th	7th	8th		13th	14th	15th	6th	7th-13th	14th			6th	7th-13th	14th-20th	21st	1st	2nd	1st	2nd onwards																				
Orientation	Term 1 (13 Weeks)											Term 2 (14 Weeks)							Term 3 (13 Weeks)							Send-up Leave	Pre-Annual Exam	Pre-Prof Leave	Final Professional Exams																				
	Overview of Clinical Sciences											Practice Based Learning							Clinical Diagnosis and Management																														
	Block 1		Eid ul Fitar		Block 1 Continued		Sport. Week	Block 1 Continued		1ST Block Exam	Eid Ul Adha/ Summer Vacations		Block 2				Independence Day	Block 2 Continued		2nd Block Exam		Block 3								3rd Block Exam																			
	9th Feb		15th March		13rd March		11th April		20th April		3rd May		4th May		14th May		8th June		21st June	22nd June		16th July		27th July								23rd Aug		14th Aug		20th Sep		21st Sep		18th Oct		19th Oct		15th Nov		16th Nov		13th Dec	
	Operative Dentistry (Batch A), Prosthodontics (Batch B), Orthodontics (Batch C), OMFS (Batch D)				Prosthodontics (Batch A), Orthodontics (Batch B), OMFS (Batch C), Operative Dentistry (Batch D)				Orthodontics (Batch A), OMFS (Batch B), Operative Dentistry (Batch C), Prosthodontics (Batch D)				OMFS (Batch A), Operative Dentistry (Batch B), Prosthodontics (Batch C), Orthodontics (Batch D)				Operative Dentistry (Batch A), Prosthodontics (Batch B), Orthodontics (Batch C), OMFS (Batch D), Paedodontics (Batch E)				Prosthodontics (Batch A), Orthodontics (Batch B), OMFS (Batch C), Paedodontics (Batch D), Operative Dentistry (Batch E)				Orthodontics (Batch A), OMFS (Batch B), Paedodontics (Batch C), Operative Dentistry (Batch D), Prosthodontics (Batch E)					OMFS (Batch A), Paedodontics (Batch B), Operative Dentistry (Batch C), Prosthodontics (Batch D), Orthodontics (Batch E)				Paedodontics (Batch A), Operative Dentistry (Batch B), Prosthodontics (Batch C), Orthodontics (Batch D), OMFS (Batch E)															
Behavioural Sciences & Research																																																	



Academic Calendar Year 4

	DENTAL COLLEGE HITEC – INSTITUTE OF MEDICAL SCIENCES
	RECORD FORMAT
	ACADEMIC CALENDAR

Final Year BDS Session – 2026/27

Duration : 40 weeks

Academic Event	Duration
Commencement of New Academic Year	9 th February 2026
Orientation day	9 th February 2026
FIRST TERM (13 Weeks)	
Academics 05/13 Weeks	9 th February 2026 to 15 th March 2026
Eid ul Fitr (1 Week)	16 th March 2026 to 22 nd March 2026
Academics 03/13 Weeks	23 rd March 2026 to 12 th April 2026
Sport week	13 th April 2026 to 19 th April 2026
Academics 04/13 Weeks	20 th April 2026 to 17 th May 2026
1 st Term exam 01/13	18 th May 2026 to 24 th May 2026
Eid ul Adha + Summer Vacations (2 Week)	25 th May 2026 to 7 th June 2026
SECOND TERM (14 Weeks)	
Academics 02/14 Weeks	8 th June 2026 to 19 th June 2026
Summer Vacation (1 week)	20 th June 2026 to 28 th June 2026
Academics 11/14	29 th June 2026 to 13 th September 2026
2 nd Term Exam 01/14	14 th September 2026 to 20 th September
THIRD TERM (13 Weeks)	
Academics 12/13 Weeks	21 st September 2026 to 13 th December 2026
3 rd Term Exam 01/13	14 th December 2026 to 20 th December 2026
Leaves Pre Prof (1 Week)	21 st December 2026 to 27 th December 2026
Send up / Pre Prof-Exam (2 Weeks)	28 th December 2026 to 08 th January 2027
Prep Leaves for Prof (3 Weeks)	09 th January 2027 to 1 st February 2027
Final Professional Exam	2 nd February 2027 as proposed by NUMS


 Coordinator Final Year BDS

Document Code	Version No	Date	Page
DDE-POL01-F-01	01	01-09-2023	1/1



Alignment of Course Outcomes with Program Outcomes (POs)

Sr. No	Course Outcome (Y4-T3)	Mapped POs	Alignment Description
1	Manage the patient with prosthodontic rehabilitation.	PO1, PO2, PO4, PO6, PO8	Patient management, appropriate referral, professional conduct, communication, and teamwork
2	Application of indirect restorations in clinical practice	PO1, PO2, PO4, PO6,	Evidence-based treatment, referral when needed, ethical practice, and communication
3	Correlate orofacial deformities with principles of orthognathic surgery	PO1, PO2, PO5, PO6,	Clinical application, recognition of referral needs, lifelong learning, and communication
4	Manage the patients with psychopharmacological interventions.	PO1, PO2, PO4, PO5, PO6	Safe management, appropriate referral, professional practice, updated knowledge, and communication



Yearly Clinical Rotation Schedule

FINAL YEAR BDS SESSION 2026

1ST ROTATION PLAN

DEPARTMENT	Operative Dentistry	Prosthodontics	Orthodontics	OMFS
09-02-26 - 15-03-26	A	B	C	D
16-03-26 – 22-03-26	Eid-ul-Fitr Holidays			
23-03-26 – 12-04-26	D	A	B	C
13-04-26 – 19-04-26	Sport Week			
20-04-26 – 03-05-26	D	A	B	C
04-05-26 – 24-05-26	C	D	A	B
25-05-26 – 07-06-26	Eid-ul-Azha			
08-06-26 – 19-06-26	C	D	A	B
20-06-26 – 28-06-26	Summer Vacations			
29-06-26 – 08-08-26	B	C	D	A

GROUPS DISTRIBUTION:

<u>Group: A</u> = Roll no: 200 – 212
<u>Group: B</u> = Roll no: 213 – 223
<u>Group: C</u> = Roll no: 224 – 234
<u>Group: D</u> = Roll no: 235 – 248 & 125



2ND ROTATION PLAN

DURATION	21 st July –07 th December (04 weeks each) ---- Departments.				
DEPARTMENT	Operative Dentistry	Prosthodontics	Paedodontics	OMFS	Orthodontics
03-08-26 – 30-08-26	A	B	C	D	E
31-08-26 – 27-09-26	E	A	B	C	D
28-09-26 – 25-10-26	D	E	A	B	C
26-10-26 – 22-11-26	C	D	E	A	B
23-11-26 – 20-12-26	B	C	D	E	A

GROUPS DISTRIBUTION:

<u>Group: A</u> = Roll no: 200 – 209
<u>Group: B</u> = Roll no: 210 – 218
<u>Group: C</u> = Roll no: 219 – 227
<u>Group: D</u> = Roll no: 228 – 236
<u>Group: E</u> = Roll no: 240 – 248 & 125



Teaching And Learning Methodologies:

The following teaching/ learning methods are used to promote better understanding:

Educational Opportunities

Hospital Wards
Dental Clinics

Practical

Basic medical sciences and dentistry practical related to are scheduled for firsthand learning of skills

Large Group Interactive Sessions - LGIS

In large group, the lecturer introduces a topic or common clinical condition and explains the underlying phenomena through questions, pictures, videos of patient's interviews, exercises, etc. Students are actively involved in the learning process.

Case-Based Learning - CBL

This is a small group discussion format where learning is focused around a series of questions based on a clinical scenario. Students discuss and answer the questions applying relevant knowledge gained in clinical and basic health sciences during the block.

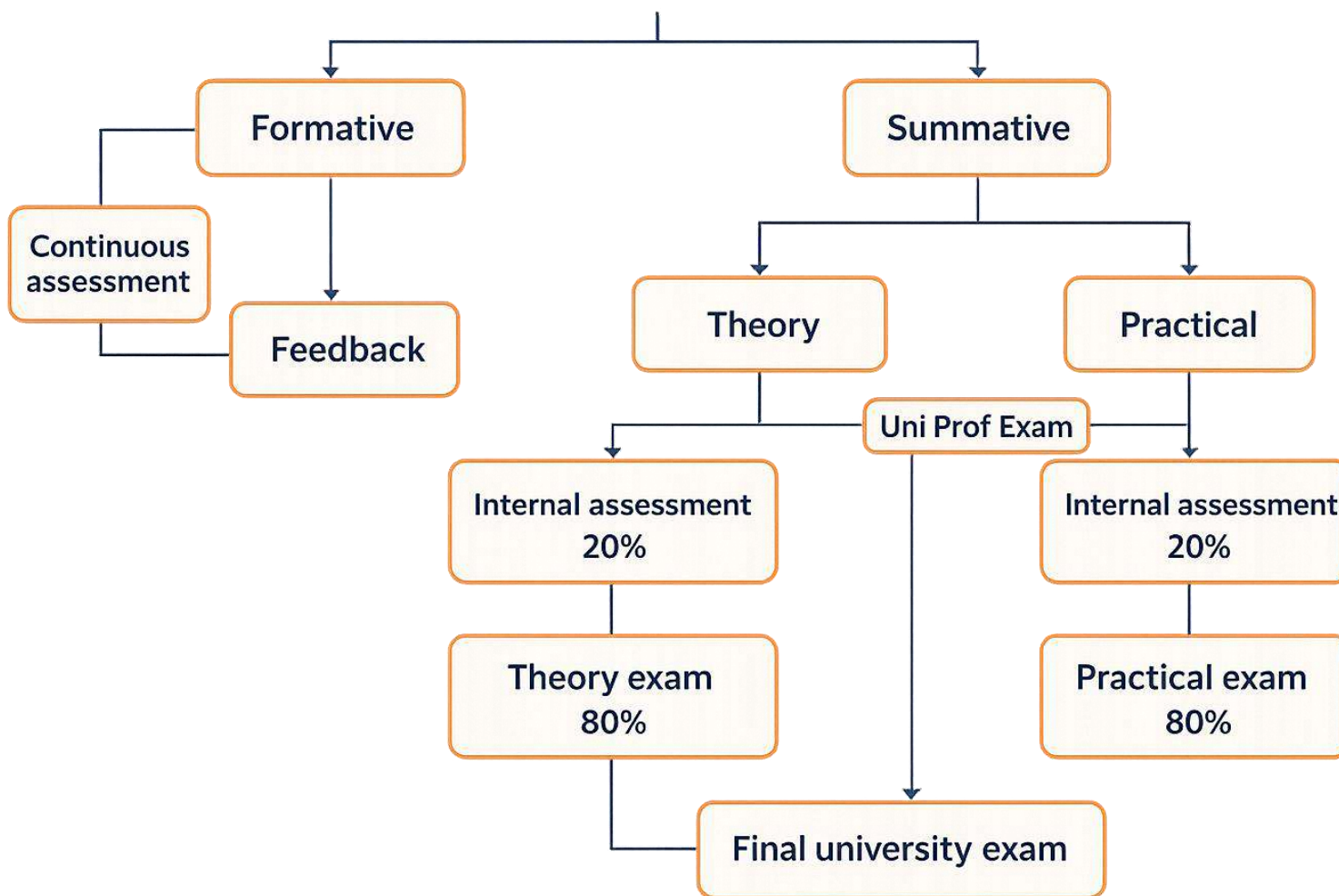
Self-Directed Study - SDL

Students assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Center, teachers and resource persons within and outside the college. Students will be provided time within the scheduled college hours for self-study.

Small Group Discussion - SGD

This format helps students to clarify concepts, acquired skills, attitudes and achieve objectives for that particular session. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials and self-study. The facilitator's role is to ask probing questions, summarize, or rephrase to help clarify and correlate integrated concepts.

Assessment Map





Structured Summary – Block III

Term Code	Y4-T3-D26
Term Title	Clinical diagnosis and management
Duration Of Term	13 weeks
Important Dates	21 th September, 2026 - 13 th December, 2026.
Horizontally Integrated Themes	1. Pre prosthetic Surgical procedure 2. Cleft lip & palate 3. Orthognathic surgery 4. Implants
Vertically Integrated Themes	● Research Methodology ● Behavior sciences
Prerequisite Blocks	1st & 2nd Blocks of Final Year



Introduction to the Block III

Block 3 of the Final Year BDS curriculum is a **13-week clinical** block designed to enhance students' competence in the diagnosis and management of complex dental conditions. The block is structured around four major themes: **Pre-prosthetic Surgical Procedures, Orthognathic Surgeries, Dental Implants, and Cleft Lip & Palate, addressing** important clinical challenges encountered in **contemporary dental practice**.

The block follows a **horizontally integrated** approach, bringing together knowledge and clinical skills from **Operative Dentistry, Pediatric Dentistry, Oral and Maxillofacial Surgery, Orthodontics, and Prosthodontics**. Through case-based discussions, clinical demonstrations, and supervised clinical practice, students develop **clinical reasoning, critical thinking, problem-solving, and evidence-based decision-making skills**.

The block also incorporates **vertical integration** through **Research and Behavioral Sciences**, supporting **evidence-based practice, professionalism, ethics, patient-centered care, communication, and teamwork**.

From Block 3 onward, **three new modules—Digital Dentistry, Patient Safety, and Professional Communication**—are introduced as **integral components of the curriculum**. These modules are designed to prepare students for contemporary dental practice by developing competence in digital technologies and workflows, promoting safe and quality-focused clinical practice, and strengthening effective communication with patients, caregivers, and multidisciplinary teams.

Clinical rotations form a major component of the block, providing supervised opportunities to apply theoretical knowledge to real-life clinical scenarios. Overall, the block aims to develop **competent, safe, ethical, digitally literate, and patient-centered dental practitioners capable of providing evidence-based multidisciplinary care**.

Goodluck students



ICONS, CODES & HIGHLIGHTING KEY		
ITEM	MEANING	PURPOSE (BRIEF)
LGIS	Large Group Interactive Session	Interactive lecture with active student participation
CBL	Case-Based Learning	Small group discussion using clinical scenarios
SGD	Small Group Discussion	Concept clarification through guided discussion
SDL	Self-Directed Learning	Independent student learning
	Vignette (Clinical Scenario)	Short patient case used to apply knowledge clinically
•	Behavioral Sciences / Professional Communications	Communication, ethics, professionalism, empathy
●	Patient Safety	Safety protocols, infection control, risk prevention
DIGITAL DENTISTRY	Digital Dentistry	Digital workflows, CAD/CAM, digital technologies and innovation
	Learning Objective	Key competency students must achieve
	Clinical Skill	Hands-on skills during rotations



Tentative Class Test Schedule (Term 3)

DATE	SUBJECT
26-10-2026	Operative dentistry and Endodontics
02-11-2026	Orthodontics
11-11-2026	Prosthodontics
17-11-2026	Oral and maxillofacial surgery
25-11-2026	Pedodontics

OPERATIVE DENTISTRY

TOPIC

LEARNING OBJECTIVES

Session – 1 Introduction to tooth discoloration		Mode of Delivery: LGIS
 You should be able to	• Enlist types of discoloration • Describe the clinical considerations for tooth discoloration	
Session – 2 Bleaching techniques		Mode of Delivery: LGIS / Chair side learning
 You should be able to	• Describe the etiology of tooth discoloration • Explain the mechanism of bleaching & use of different bleaching agents	
Session – 3 Micro abrasion / Macro abrasion		Mode of Delivery: LGIS/ Chair side learning

 You should be able to	Describe the indications, contraindications & clinical procedures for micro/macro abrasion
Session – 4,5 Veneers	Mode of Delivery: LGIS
 You should be able to	- Enlist types of veneers - Discuss indications, contraindications and clinical considerations for veneers - Describe steps of direct and indirect veneers - Explain the concept of repair of veneers
Session – 6, 7,8 Tooth prep for indirect restorations	Mode of Delivery: LGIS & CHAIR SIDE
 You should be able to	- Discuss the uses of indirect restorations - Enlist types of indirect restorations - Describe the indications/contraindications of inlays and onlays

Session – 9,10 CAD/CAM		Mode of Delivery: LGIS
 You should be able to	● Highlight clinical application of CAD/CAM ● Discuss tooth preparation principles of CAD/CAM restorations ● Enlist chairside restorative materials for CAD/CAM restorations ● Highlight the significance of digital dentistry ● Discuss longevity of CAD/CAM restorations. ● Explain the digital workflow of CAD/CAM restorations. ● Compare conventional and digital restorative procedures. ● Discuss the role of intraoral scanning in restorative dentistry.	
Session – 11, 12 Non odontogenic toothache		Mode of Delivery: LGIS Chair side learning
 You should be able to	● Describe the diagnosis, mechanism & versatility of orofacial pain ● Differentiate between superficial & deep pain ● Discuss classification of orofacial pain ● Describe the diagnostic procedures for non-odontogenic toothache	

Session – 13, 14 NCCL		Mode of Delivery: LGIS Chair side learning
 You should be able to	• Classify NCCL • Explain the etiology of NCCL • Describe the clinical features of abrasion, attrition, erosion, abfraction • Enumerate set of investigations to reach diagnosis of NCCL • Discuss management of NCCL	
Session-15,16 Radiographic interpretation		Mode of Delivery: LGIS Chair side learning
 You should be able to	• Describe the use and implications of Occlusal radiographs, OPG& CBCT in dental office .	
Session-17,18 Color and shade matching		Mode of Delivery: LGIS

 You should be able to	● Explain the concept of color perception, deficiency & dimensions with regard to color related properties of tooth & restorative materials ● Enumerate various color matching tools, instruments & techniques	
Session-19,20 Recent trends in dentistry		Mode of Delivery: LGIS Chairside learning
 You should be able to	● Outline recent trends in dentistry and their implications in everyday practice	
Session -21 Pain control		Mode of Delivery: LGIS Chair side learning
 You should be able to	● Explain factors affecting endodontic anesthesia ● Describe different techniques for effective pain control in endodontics with focus on supplemental anesthesia	
Session-22,23,24,25 Case presentations		Mode of Delivery: LGIS SGD, CHAIRSIDE



You should be able to

- Diagnose and make treatment plan for clinical cases
- Improve presentation skills

Total no of sessions	Mode of Assessment
25	(SAQs, MCQs, VIVA)

PAEDIATRIC DENTISTRY

TOPIC	LEARNING OBJECTIVES
-------	---------------------

Session -1 and 2 Hospital Dentistry	Mode of Delivery: LGIS
--	-------------------------------



You should be able to

- Describe the procedures and protocols for admitting patients for hospital dentistry.
- Explain the investigations required before initiating dental treatment in a hospital setting, including medical history, laboratory tests, and radiographic examinations.
- Describe the process of discharging patients after hospital-based dental treatment, including post-operative care instructions and follow-up plan
- Assess the risks and benefits of using general anesthesia for individual pediatric dental patients.
- Integrate safety protocols and emergency management strategies into their practice.

Session – 3
Minor Oral Surgery

Mode of Delivery: LGIS



You should be able to

- Recognize common oral pathologies in pediatric patients that may require surgical intervention.
- Interpret diagnostic imaging and tests specific to pediatric oral conditions.
- Develop post-operative care plans that include pain management, diet, and activity restrictions
- Monitor and manage common post-operative complications in pediatric patient.

Session -4,5
Regenerative Endodontics

Mode of Delivery: LGIS



You should be able to

- Understanding Dental Pulp Anatomy and Physiology
- Learn the goals and principles of Tissue Engineering and Regeneration
- Determine the treatment Planning and Case Selection
- Learn Clinical Techniques and Procedures

Session – 6,7

Dental Anomalies

Mode of Delivery: LGIS



You should be able to

- Describe the different types of dental anomalies, including developmental, congenital, and acquired anomalies.
- Identify the etiology and pathogenesis
- Develop a treatment plan for dental anomalies
- Apply critical thinking and problem-solving skills to complex cases of dental anomalies,

Session -8,9,10 and 11

Periodontal diseases in children

Mode of Delivery: LGIS



You should be able to

- Learn the etiological factors responsible for periodontal and gingival diseases, including bacterial plaque, calculus, and host response.
- Recognize and describe the clinical signs and symptoms of gingival and periodontal diseases
- Perform a comprehensive periodontal examination, including charting, probing, and assessment of gingival recession.
- Develop accurate diagnoses and formulate appropriate treatment plans tailored to individual patient needs.

Session –12,13

Dental management of children with systemic disease

Mode of Delivery: LGIS



You should be able to

- Understand the Impact of Systemic Diseases
 - Identify Common Systemic Condition
 - Develop Comprehensive Treatment Plans
 - Collaborate with Medical Teams
 - Modify Dental Procedures

Total no of sessions	Mode of Assessment
13	(SAQs, MCQs, OSCE VIVA)

PROSTHODONTICS

Session – 1&2 Direct Retainers		Mode of Delivery: LGIS
 You should be able to	• Define retainers • Classify direct retainers • Describe factors affecting amount of retention • Describe basic principles of clasp design • Enlist indications and contraindications for circumferential and bar clasps • Describe RPI and RPA systems • Describe internal attachments	
Session – 3 Indirect Retainers		Mode of Delivery: LGIS
 You should be able to	• Define indirect retainers • Describe factors that influence the effectiveness of indirect retainers • Describe auxiliary functions of indirect retainers • Describe various forms of indirect retainers	
Session – 4 Denture Base Considerations		Mode of Delivery: LGIS

 You should be able to	• Describe functions of tooth-supported and tooth & tissue supported denture bases • Compare advantages and disadvantages of metal and resin denture bases • Describe methods of attaching artificial teeth • Describe stress breakers	
Session – 5 Principles of RPD Designing		Mode of Delivery: LGIS
 You should be able to	• Describe the difference in prosthesis support and influence on design • Differentiate between two main types of removable partial denture	
Session – 6&7 Surveying		Mode of Delivery: LGIS
 You should be able to	• Define surveying • Differentiate between various types of surveyors • Enlist objectives of surveying • Describe factors which determine the path of placement and removal • Describe tripoding and its types	

Session – 8 Diagnosis and Treatment Planning		Mode of Delivery: LGIS
 You should be able to	• Enumerate objectives of prosthodontic treatment • Enlist indications for removable partial dentures • Enlist steps involved in diagnosis of a patient prosthodontic treatment options • Describe factors that affect prosthesis selection • Enlist the available prosthodontic treatment options	
Session – 9 Management of Partially Dentate Patients		Mode of Delivery: LGIS.
 You should be able to	• Understand the common reasons for tooth loss and how they can impact a patient's overall oral health. • Explore various restorative options available for partially dentate patients • Understand the indications, advantages, and limitations of each option.	
Session – 10 Mouth preparation for RPD		Mode of Delivery: LGIS

 You should be able to	• Describe oral surgical preparation for removable partial denture patient • Describe conditioning of abused and irritated oral tissues • Describe long-term complications associated with overdenture abutments
Session – 11 Impressions for RPD	Mode of Delivery: LGIS
 You should be able to	• Describe different materials for impression making in RPD • Describe different techniques for impression making of partially edentulous arches
Session-12 Lab procedures for RPD	Mode of Delivery: LGIS.
 You should be able to	• Describe the procedure of cast duplication • Describe the waxing procedure of cast partial denture and framework fabrication • Explain the steps for processing of denture
Session-13 Denture support for distal extension denture bases	Mode of Delivery: LGIS

 You should be able to	• Name factors affecting support of a distal extension partial denture • Describe the various methods for obtaining functional support for distal extension partial dentures
Session-14 Occlusal relationship for RPD	
 You should be able to	• Describe the desirable occlusal contact relationship for RPD • Describe the methods for establishing occlusal relationship
Session-15 Insertion and follow up	
 You should be able to	• Explain the protocol for denture insertion • Describe the instructions given to patient after partial denture insertion • Describe the follow up protocol after partial denture insertion
Session-16 Relining and Rebasing the RPD	
Mode of Delivery: LGIS	

 You should be able to	• Explain the need and procedure of relining for tooth supported denture bases • Describe the relining for distal extension denture bases • Explain the methods of reestablishing occlusion on relined RPD	
Session-17 Repairs and addition to RPD		Mode of Delivery: LGIS
 You should be able to	• Explain the cause broken clasp arms, rests, major/minor connectors, loss of artificial teeth • Explain the procedures for the repair of fractures components of cast partial denture • Understand the concept of soldering	
Session-18 Interim RPD		Mode of Delivery: LGIS
 You should be able to	• Describe the indications for interim RPD	
Session-19 Introduction to Implants		Mode of Delivery: LGIS

 You should be able to	• Define dental implant • Define components of a dental implant assembly • Classify dental implants • Enlist differences between teeth and implants • Define dental implant abutments and their role in the dental implant restoration process. • Describe the indications, advantages and disadvantages of cement-retained and screw-retained abutment • Discuss the importance of selecting appropriate abutments
Session-20 Treatment Planning in Implants	
 You should be able to	• Describe treatment options for edentulous maxilla • Describe treatment options for edentulous mandible • Describe inclusion and exclusion criteria for implant treatment • Describe various available implant supported overdenture treatment options • Enumerate indications for ball, magnetic and bar attachments • Describe the steps involved in treatment planning for implant-supported prosthesis, including radiographic evaluation and diagnostic casts
Session-21 Impression making in implant dentistry	
 You should be able to	• Describe about the different types of impression materials available for implant supported prosthesis • Describe the different techniques for impression making in implant dentistry

Session-22 Management of complications		Mode of Delivery: LGIS
 You should be able to	Enlist possible problems and complications associated with dental implants	
Session-23 Introduction to Maxillofacial Prosthodontics		Mode of Delivery: LGIS
 You should be able to	- Describe different types of maxillofacial defects - Describe prosthetic considerations for patients requiring maxillofacial prosthesis - Describe prosthodontic treatment considerations for irradiated edentulous and partially dentate patients - Describe Aramany's classification for partially edentulous maxillectomy dental arches	
Session-24 Types, Indications and objectives of obturators		Mode of Delivery: LGIS
 You should be able to	- Identify various types of maxillary obturator prosthesis - Discuss indications of various types obturators and their indications	

Session-24		Mode of Delivery: LGIS	
Digital Dentistry			
 You should be able to		- Define digital dentistry and explain its significance in modern dental practices. - Identify the key components involved in digital dentistry - Describe the advantages and benefits of digital dentistry - Recognize the various applications of digital dentistry in prosthodontics - Discuss the advantages of CAD-CAM - Discuss the advantages of 3D printing, milling - Discuss the advantages of Intraoral oral scanners - Discuss the advantages, and disadvantages of CBCT - Interpret CBCT for treatment planning.	
		- Describe the applications of CAD/CAM and 3D printing in prosthodontics. - Explain the role of intraoral scanners in prosthodontic treatment planning. - Interpret CBCT findings relevant to prosthodontic rehabilitation.	

Total no of sessions	Mode of Assessment
25	(SAQs, MCQs, OSCE VIVA)

ORTHODONTICS

Session – 1&2 Removable Orthodontic Appliances		Mode of Delivery: LGIS, SGD
 You should be able to	• Explain the design of removable appliances • Describe the different components of a removable appliance • Describe the commonly used removable appliances • Discuss the monitoring of progress of removable appliance treatment	
Session –3, 4 & 5 Fixed Orthodontic Appliances		Mode of Delivery: LGIS
 You should be able to	• Describe the principles of fixed appliance treatment. • Discuss the indications of fixed appliances. • Describe the components of fixed appliances. • Discuss the treatment planning in fixed appliance treatment. • Explain the practical procedures involved in Fixed appliance treatment. • Describe the different fixed appliance systems.	
Session –6 & 7 Cleft Lip & Palate		Mode of Delivery: LGIS

 You should be able to	• Describe the prevalence, Etiology and Classification of Cleft Lip & Palate • Discuss the extra-oral and intra-oral features of Cleft Lip & Palate • Discuss the inter-disciplinary management protocol of Cleft Lip & Palate patient from birth till adult life.	
Session –8, 9, 10 &11 Adjunctive & Multi-disciplinary Orthodontic Approaches		Mode of Delivery: LGIS
 You should be able to	• Define adjunctive orthodontics. • Compare adjunctive with comprehensive orthodontics • Discuss the principles of Adjunctive Orthodontic treatment • Discuss the diagnostic and treatment planning considerations in Adjunctive Orthodontic treatment • Describe the different Adjunctive Orthodontic treatment procedures • Discuss the orthodontic treatment of patients with periodontally involved dentition • Discuss the orthodontic considerations in patients with temporomandibular dysfunction	
Session –12, 13, 14 & 15 Functional Appliances		Mode of Delivery: LGIS
 You should be able to	• Define a functional appliance • Describe the overview and timing of treatment of functional appliance treatment • Describe and compare different types of functional appliances • Explain the practical procedures involved in functional appliance treatment	

	• Explain the mechanism of action of functional appliances	
Session –16 & 17 Orthopedic Appliances		Mode of Delivery: LGIS
 You should be able to	• Describe the design, indications, types and clinical management of headgear • Describe the design, indications and clinical management of Protraction Facemask	
Session –18 & 19 Biomechanical Properties of Orthodontic Arch wires		Mode of Delivery: LGIS
 You should be able to	• Describe the basic properties of elastic materials • Discuss the biomechanical properties of orthodontic archwires	
Session –20, 21 & 22 Orthodontics & Orthognathic Surgery		Mode of Delivery: LGIS

 You should be able to	• Describe the indications and objectives of combined orthodontic-orthognathic surgical treatment • Discuss the diagnostic and treatment planning considerations in combined orthodontic-orthognathic surgical treatment • Describe the common orthognathic surgical procedures • Discuss the sequence of combined orthodontic-orthognathic surgical treatment .
Session –23, 24 & 25 Retention & Relapse	Mode of Delivery: LGIS
 You should be able to	• Define Relapse in orthodontics • Compare Relapse with post-treatment changes • Discuss the etiological factors involved in relapse • Discuss the factors that are to be considered in planning retention • Describe the types of retainers • Discuss the indications and problems associated with fixed retainers • Explain the adjunctive techniques used to reduce post-treatment changes
Session –26 Functional Appliances	Mode of Delivery: SGD, CBL

Vignette:



A 12-year-old boy is brought to an orthodontist with the chief complaint of prominent upper front teeth. Clinical examination and evaluation of diagnostic records reveal a convex facial profile, skeletal Class II Malocclusion with mandibular retrognathism, increased overjet and mild crowding in both arches. A two-phase treatment with first phase involving growth modification followed by a second phase of fixed appliance treatment using fixed pre-adjusted edgewise appliance is planned.



You should be able to

- Plan a functional appliance for a growing patient with Class II Malocclusion
- Debate on timing of growth modification treatment in Class II Malocclusion
- Compare the different functional appliances used in Class II Malocclusion
- Discuss the mechanism of action and clinical effects of functional appliance treatment

Total no of sessions	Mode of Assessment
26	(SAQs, MCQs, OSCE VIVA)

OMFS:

Session –1& 2 PRE-PROSTHETIC SURGERY		Mode of Delivery: LGIS
 You should be able to	• Enlist objectives of pre-prosthetic surgery. • Name & describe ridge extension, augmentation and correction (osteotomies) procedures for mandible and maxilla. • Describe the principles of following surgical procedures: alveoloplasty- simple, interseptal (Dean's), tuberosity reduction, exostosis and undercuts correction, tori removal, mylohyoid ridge reduction, genial tubercle reduction, retromolar pad reduction, lateral palatal soft tissue excess removal, unsupported hypermobile tissue removal, inflammatory fibrous hyperplasia removal, labial and lingual frenectomy.	
Session -3 PRE-PROSTHETIC SURGERY		Mode of Delivery: LGIS
 You should be able to	• Describe protocol for immediate denture placement/ construction • Describe methods of ridge - preservation. • Describe procedure and advantages of over dentures	

	Discuss complications of pre- prosthetic surgery	
Session –4,5 & 6 DENTAL IMPLANTS		Mode of Delivery: LGIS
 You should be able to	- Define dental implant and identify its components. - Define osseointegration, list factors influencing osseointegration. - Define the following terms related to dental implants: endosseous, root- form, cover screw, healing abutment/gingival former, single/two stage, screw/cement retained, biotypes. - Describe the following considerations for implant placement: soft tissue, hard tissue and biomechanical - Describe the surgical procedure for one stage, two stage and immediate dental implant placement - Enlist complications of implant surgery and describe their management - Describe ridge augmentation and preservation, guided bone regeneration, onlay bone grafting, sinus lift and distraction osteogenesis. - Describe the role of CBCT in diagnosis and treatment planning of maxillofacial conditions. - Explain the use of digital surgical planning in implantology and orthognathic surgery.	
Session –7, 8 & 9 TEMPOROMANDIBULAR JOINT		Mode of Delivery: LGIS, SGD

 You should be able to	• Evaluate a patient with TMJ disorder • Classify TMJ disorders as: myofascial, internal derangement (Wilke’s), systemic arthritis conditions, chronic recurrent dislocation, ankylosis, neoplasia and infections • Examine & evaluate a patient with TMJ disorder • Select management options for TMD and ankylosis (conservative and surgical) • Reduce Manually TMJ dislocation on skull Model	
Session – 10 &11 ORO-FACIAL PAIN		Mode of Delivery: LGIS
 You should be able to	• Describe the pathophysiology of neuropathic pain • classify Oro-facial pain according to site and etiology • Diagnose trigeminal neuralgia and describe its management options. • differentiate trigeminal neuralgia from pain of odontogenic origin, post-herpetic neuralgia, neuroma, burning mouth syndrome, glossopharyngeal neuralgia and Headache • classify various types of headaches according to clinical features	
Session –12 & 13 SALIVARY GLANDS		Mode of Delivery: LGIS
	• Describe pathophysiology and presentation of obstructive, retentive, infectious and neoplastic salivary gland disease • Classify Salivary Gland tumors according to benign and malignant categories	

You should be able to	● Describe various diagnostic modalities for salivary gland disorders ● Describe the principles of management of the following salivary gland disorders: sialolithiasis, mucocele, ranula, infections, traumatic injuries to salivary glands, pleomorphic adenoma, Warthin's tumor, mucoepidermoid carcinoma, adenoid cystic carcinoma, adenocarcinoma.
Session – 14, 15 & 16 DENTOFACIAL DEFORMITY	
 You should be able to	● Enlist causes of dentofacial deformities ● Evaluate a patient with dentofacial deformity ● Order and interpret relevant investigations ● Describe the pre-surgical preparation for orthognathic surgery patients. ● Describe the surgical treatment options (osteotomies) for the following: mandibular excess, mandibular deficiency, maxillary and mid-face deficiency, combination deformity & Facial asymmetry. ● Define Distraction Osteogenesis, describe the role and advantages of distraction osteogenesis in OMF region ● Discuss the applications of 3D printing and surgical guides in OMFS. ● Recognize the advantages and limitations of digital imaging in surgical practice
Session - 17 &18 SURGICAL ENDO-DONTICS	
Mode of Delivery: LGIS	

 You should be able to	• Evaluate a patient with a periapical pathology and order and interpret relevant investigations. • discuss indications for surgical endodontic procedures • List contraindications for surgical endodontics • select appropriate procedure, flap, technique and (root-end filling) materials for surgical endodontics.
Session – 19 & 20 CLEFT LIP & PALATE	Mode of Delivery: LGIS
 You should be able to	• Describe incidence and etiology of cleft lip & palate • Explain CLP pathogenesis at embryological level • Name the number of different types of rare facial clefts in addition to cleft lip and palate • Classify cleft lip and palate for communication and record keeping. • enlist the OMF problems faced by a cleft patient, from prenatal period till life long • Constitute a team for the treatment of a cleft patient. • Describe the treatment of a cleft patient according to the sequence and surgical procedures. • Enlist various syndromes associated with CLP • Explain various surgical procedures for CLP repair
Session –21 & 22 HOSPITALALIZED PATIENTS & GENERAL ANESTHESIA	Mode of Delivery: LGIS



You should be able to

- Describe when to hospitalize a dental patient for management
- Evaluate a patient for OMF surgery under GA
- List pre-operative management of patient for major oral surgery: investigations and consults with reference to ASA status.
- Describe assessment of fitness, normal, abnormal cardiac and respiratory signs,

Total no of sessions	Mode of Assessment
22	(SAQs, MCQs, OSCE VIVA)

CLINICAL ROTATIONS:

OPERATIVE DENTISTRY

Week –1
Orientation to Operative Department

Mode of Delivery:
DEMONSTRATION

 You should be able to	• Demonstrate correct operator and patient positioning for maxillary and mandibular procedures. • Adjust dental chair and light for optimal visibility and access. • Elicit comprehensive medical and dental history relevant to operative procedures. • Effectively communicate & build rapport with patient • Obtain informed consent effectively • Provide evidence-based knowledge in patient friendly words • Perform pre-procedural patient verification using safety checklists. • Apply standard infection prevention and sterilization protocols.	
Week –2 Foundations of Operative Dentistry: Examination and Instrumentation		Mode of Delivery: DEMONSTRATION
 You should be able to	• Perform systematic intraoral and extraoral examination. • Correlate clinical findings with diagnosis and treatment planning. • Identify and classify operative instruments and rotary equipment • Explain dental problems & etiologies to patient • Explain preventive & management strategies to patient • Prevent accidental ingestion or aspiration of dental materials and instruments	

Week –3 Liners & Bases Shade matching for aesthetic restorations		Mode of Delivery: DEMONSTRATION
 You should be able to	• Select & Apply liners/bases correctly following clinical protocols. • Apply principles of color (hue, value, chroma) in restorative dentistry. •	
Week –4 Amalgam & composite restorations		Mode of Delivery: DEMONSTRATION
 You should be able to	• Perform stepwise cavity preparation and restoration placement • Effectively manage dental pain & anxiety. • Effectively perform relevant dental procedure • Use rubber dam isolation appropriately to enhance patient safety.	
Week –5 Matrix band application		Mode of Delivery: DEMONSTRATION

 You should be able to	• Select appropriate matrix system for different cavity types. • Demonstrate proper placement to achieve correct proximal contour and contact
Week –6 Endodontic instruments	Mode of Delivery: DEMONSTRATION
 You should be able to	• Identify and classify endodontic hand and rotary instruments. • Demonstrate correct use and sequence of instruments • Handle rotary instruments and sharp devices safely to prevent injury. • Identify and manage medical emergencies that may arise during operative procedures.
Week –7 Access opening / radiographic interpretation	Mode of Delivery: DEMONSTRATION
 You should be able to	• Demonstrate correct access cavity preparation for different teeth.

Week –8
Canal preparation & obturation

Mode of Delivery:
DEMONSTRATION



Vignette

A 17-year-old student presents with multiple carious lesions, including a grossly carious mandibular right first molar with a discharging buccal sinus. He reports a lost filling causing sharp irritation but no current pain. History reveals incomplete previous dental treatment after an episode of thermal sensitivity. Examination shows localized gingivitis, shallow pockets (<3 mm), and additional small occlusal cavities in molars



You
should
be able
to



- Perform appropriate investigations and use relevant radiographs to diagnose dental caries and assess risk for effective patient management.
- Develop a comprehensive, risk-based treatment plan, including selection of suitable restorative materials and sequencing of care.



	• Perform cleaning and shaping using appropriate techniques. • Demonstrate obturation with proper length, density, and seal • Communicate post-operative instructions to patient • Demonstrate safe handling and disposal of hazardous dental materials. • Document and report patient safety incidents according to institutional protocols. • Educate patients on post-operative care to minimize complications
Week –9 EXIT EXAM	Mode of Delivery: Ward Test
 You should be able to	• Complete and Submit LOG BOOKS • End of Rotation Ward Test

Total no of weeks.	Mode of Assessment
9	(DOPs, OSCE Mini-CEX, VIVA)

PROSTHODONTICS

Week –1 Orientation to Prosthodontic Department History taking and clinical examination		Mode of Delivery: DEMONSTRATION
 You should be able to	● Introduction to clinical area and related instruments used ● Technique of history taking and clinical examination ● Establish rapport and obtain a complete medical, dental, social, and prosthodontic history using patient-centered communication. ● Identify behavioral factors that may affect treatment (anxiety, unrealistic expectations, non-compliance, cognitive or communication barriers). ● Recognize medical and safety risks relevant to complete denture treatment (frailty, aspiration risk, xerostomia, uncontrolled systemic disease, anticoagulant use, allergies, infection risk) and seek appropriate supervision/referral when indicated.	
Week –2 Primary impressions of edentulous patient, custom tray fabrication, secondary impression and maxillomandibular relationship		Mode of Delivery: DEMONSTRATION
 You should be able to	● Primary impression using impression compound ● Custom tray fabrication using auto polymerizing resins ● Secondary impression taking with zinc oxide eugenol using greenstick for border molding ● Provide clear procedural instructions and reassurance throughout impression procedures. ● Identify and manage gag reflex, anxiety, and discomfort using appropriate behavioral strategies and safe positioning.	



	● Apply infection-prevention and cross-contamination control measures during impression handling, disinfection, transport, and laboratory communication.	
Week –3 Try in and teeth arrangement		Mode of Delivery: DEMONSTRATION
 You should be able to	● Learn teeth arrangement and utilize biometric guidelines ● Verification of esthetic, phonetics and centric record and VDO at try-in of dentures. ● Demonstrate patience and adaptive communication for elderly, hearing-impaired, cognitively impaired, or anxious patients. ● Discuss esthetic and functional expectations respectfully and involve the patient in shared decision-making. ● Address dissatisfaction, phonetic concerns, and appearance-related concerns empathetically and professionally. ● Verify patient identity and record accuracy before laboratory submission to reduce wrong-patient or wrong-record errors.	
Week –4 Lab processing of Denture and insertion		Mode of Delivery: DEMONSTRATION

 You should be able to	● Procedures for processing of denture and insertion ● Perform flasking, de waxing, packing, curing and finishing of dentures ● Counsel the patient regarding insertion, removal, cleaning, overnight storage, adaptation, speech, mastication, and expected sore spots. ● Assess the patient’s ability to insert and remove the denture safely before discharge. ● Provide written and verbal post-insertion instructions and verify comprehension using teach-back	
Week –5 Follow-up and post insertion complaints		Mode of Delivery: DEMONSTRATION
 You should be able to	● Post insertion follow-up ● Management of complains after insertion ● Encourage adherence to review appointments and maintenance instructions. ● Evaluate complaints (pain, looseness, instability, gagging, speech difficulty, stomatitis) systematically and empathetically.	
Week –6 Anterior crown preparation		Mode of Delivery: DEMONSTRATION



Vignette

A 58-year-old diabetic male presents for replacement of his maxillary complete denture, complaining of poor esthetics and difficulty chewing. He has worn the maxillary complete denture for 4 years without replacement of the mandibular posterior teeth. Clinical examination reveals severe occlusal wear, an anteroposterior tilt of the maxillary occlusal plane, and anterior maxillary ridge resorption. The patient also exhibits reduced incisal display and a decreased vertical dimension of occlusion.



You should be able to

- Learn about principles of anterior crown preparation
- Escalate concerns, near misses, and adverse events promptly according to institutional policy.
- Demonstrate accountability by seeking supervision when competence limits are reached and by participating in reflective learning after patient-safety incidents or difficult encounters.

Week –7

Posterior crown preparation

Mode of Delivery:

DEMONSTRATION

 You should be able to	• Learn about principles of posterior crown preparation
Week –8 Cast partial denture designing	Mode of Delivery: DEMONSTRATION
 You should be able to	• Learn about designing of cast partial dentures Kennedy’s I, II,III &IV
Week –9 Exit Exam	Mode of Delivery: DEMONSTRATION
 You should be able to	

Total no of weeks.	Mode of Assessment
9	(DOPs, OSCE Mini-CEX, VIVA)

PAEDIATRIC DENTISTRY

Week-1 History taking and clinical examination Chair positioning and tray set up Materials and instruments used in Pediatric dentistry		Mode of Delivery: DEMONSTRATION
 You should be able to	- Record history and clinical examination for a child including medical, dental, and behavioral assessments - Correct chair positioning for an infant, a preschooler, and an adolescent, setting up a Pediatric dental tray with appropriate infection control. - Establish effective doctor–patient rapport in clinical settings - Demonstrate empathy, active listening, and patient-centered communication - Verify the identity of pediatric patients and obtain appropriate consent before treatment. - Apply infection prevention measures appropriate for pediatric dental care.	
Week –2 Behavior management Patient counselling		Mode of Delivery: DEMONSTRATION

 You should be able to	● Identify and classify child behaviours (e.g., cooperative, lacking cooperation, potentially cooperative) using recognized scales ● Basic non-pharmacological behaviour management techniques ● Identify for advanced behaviour management strategies ● Demonstrate safe behavior guidance techniques while maintaining patient dignity.
Week-3 Pits and fissure sealants Preventive Dentistry, Role of Fluorides Fluoride Toxicity	Mode of Delivery: DEMONSTRATION
 You should be able to	● Perform a comprehensive paediatric dental examination. ● Select and apply pit and fissure sealants and fluoride agents based on caries risk assessment. ● Identify and correctly use Pediatric-specific instruments and materials
Session –4 Dental Emergencies Management of dental traumatic injuries	Mode of Delivery: DEMONSTRATION, CBL
 Vignette: Bilal, a 12-year-old boy, was brought to the dental emergency clinic by his uncle 45 minutes after falling on the stairs at school. His upper right permanent central incisor (#11) was completely avulsed, and the tooth was transported wrapped in a tissue paper. On	

examination, Bilal was anxious and complained of pain. The upper lip was swollen, and intraoral examination revealed an empty bleeding socket with tenderness of the adjacent teeth. The avulsed tooth had an immature open apex (Cvek stage III–IV), and the child had no relevant medical history.



You should be able to

- Assess a child presenting with a dental emergency by taking history and performing a systematic extraoral and intraoral examination.
- Differentiate between types of traumatic dental injuries using clinical and radiographic findings
- Demonstrate emergency management for an avulsed permanent tooth in a child
- Apply child behaviour management techniques
- Communicate effectively with parents/guardians
- Reduce dental anxiety in pediatric patients
- Use positive reinforcement and behaviour shaping
- Prevent aspiration and ingestion of instruments and materials during treatment.

ORTHODONTICS

Week-1 Orientation to the Orthodontic department, Orthodontic Instruments History taking & Clinical examination, Impression taking	Mode of Delivery: DEMONSTRATION
 You should be able to	● Identify basic orthodontic instruments ● History taking ● Perform basic clinical examination to formulate a preliminary orthodontic diagnosis ● Demonstrate infection control protocols during clinical examination & impression making ● Demonstrate empathy, active listening, and patient-centered communication. ● Obtain informed consent effectively. ● Demonstrate ethical behavior in patient care including patient's dignity, privacy, confidentiality, consent and autonomy. Demonstrate empathy and cultural sensitivity when interacting with patients from diverse backgrounds. ● Communicate relevant information to promote patient safety and continuity of care ● Motivate patients for long-term orthodontic compliance. ● Explain treatment duration, limitations, and responsibility. ● Manage adolescent behavioural issues professionally.



Week-2 Cast Analysis		Mode of Delivery: DEMONSTRATION
 You should be able to	● Practice the basic technique of performing cast analysis ● Establish rapport and maintain professional conduct with patients and attendants. ● Demonstrate empathy and cultural sensitivity when interacting with patients from diverse backgrounds.	
Week-3 Basic wire bending		Mode of Delivery: DEMONSTRATION
 You should be able to	● Construct basic components of removable appliances on models such as Adam's clasp and labial bow. ● Handle orthodontic wires and instruments safely to prevent soft tissue injury. ● Recognize and manage orthodontic emergencies safely. ● Prevent aspiration and ingestion of orthodontic components during appliance placement and adjustment.	
Week-4 Lateral Cephalometry		Mode of Delivery: DEMONSTRATION

 You should be able to	• Demonstrate skills in lateral cephalometric tracing • Perform basic composite analysis
Week-5 Lateral Cephalometry	
 You should be able to	• Demonstrate skills in lateral cephalometric tracing • Perform basic composite analysis
Week-6 OPG Interpretation/Digital Dentistry Hawley's retainer construction	
 You should be able to	• Systematically examine an OPG using a standardized approach to identify both the normal and abnormal findings • Construct a clinically acceptable Hawley's retainer independently following standard orthodontic laboratory procedures. • Describe the applications of intraoral scanning in orthodontics. • Discuss digital treatment planning using orthodontic software and CBCT. • Explain the digital workflow for aligner-based orthodontic treatment.

Week-7 Mixed dentition analysis		Mode of Delivery: DEMONSTRATION
 You should be able to	• Perform mixed dentition space analysis using commonly employed methods such as Moyers analysis, Tanaka–Johnston Analysis & Radiographic analysis • Interpret the results of mixed dentition analysis and calculate Arch length discrepancy	
Week-8 Wire bending		Mode of Delivery: DEMONSTRATION
 You should be able to	• Construct a Z-spring according to standard design specifications with accurate dimensions and helices • Construct a finger spring with appropriate helix, active arm, and retentive components following standard laboratory procedures	
Week-9 Case presentation		Mode of Delivery: PRESENTATIONS



You should be able to

- Comprehensive orthodontic history from a patient using a structured approach.
- Extraoral and intraoral examination of an orthodontic patient document the findings.
- Identify and record dental, skeletal, and soft tissue abnormalities
- Interpret diagnostic records, including study casts, photographs, cephalometric radiographs
- Formulate a comprehensive orthodontic diagnosis based on findings.
- Develop a problem list by prioritizing the patient's orthodontic problems.
- Construct an appropriate treatment plan
- Present an orthodontic case in a logical, organized, and professional manner using standard orthodontic case presentation protocols.

Total no of weeks.	Mode of Assessment
9	(DOPs, OSCE Mini-CEX, VIVA)

ORAL AND MAXILLOFACIAL SURGERY

Week-1 Orientation to OMFS	Mode of Delivery: DEMONSTRATION
---	--

 You should be able to	● Orientation to OMFS ● Conduct comprehensive history taking and clinical examination with effective patient-centered communication, while maintaining dignity, privacy, and professional rapport. ● Apply ethical principles in clinical practice, including informed consent, patient autonomy, empathy, and cultural sensitivity. ● Accurately document clinical findings, perform prescription writing, and communicate relevant information to ensure patient safety and continuity of care ● Perform the Examination of head and neck region
Week-2 Local Anesthesia	Mode of Delivery: DEMONSTRATION
 You should be able to	● Identify & Describe LA ● Armamentarium ● Dosage ● Complications ● anatomical landmarks for various LA techniques ● Perform various techniques of Nerve Blocks & local anesthesia
Week-3 Exodontia	Mode of Delivery: DEMONSTRATION

 You should be able to	• Identify appropriate Armamentarium • Apply Principles of instruments used in exodontia • Application and Handling of elevators & forceps. • Interpret Radiological findings: Periapical & OPG, impacted canine & 3rd molars
Week-4 Medical Management of Compromised Patients TMJ and Pathology	
 You should be able to	• Describe Common Medical Emergencies with Prevention, Diagnosis & Management • Enlist Emergency trolley drugs • Operate Oxygen Cylinder • Perform Clinical Examination of TMJ, Salivary Glands and Lymph Nodes • Perform Reduction of Dislocated TMJ on skull models
Week-5 Formative Assessment	
 You should be able to	• DOPS followed by individual feedback
Week-6 Basic Principles of Surgery	
Mode of Delivery: DEMONSTRATION	

 You should be able to	• Describe suturing material types, their application, specification of suturing needle and suture • Perform various Suturing Techniques + Assignment • Draw and label various surgical flaps used in minor oral surgery + Assignment • Identify and use of appropriate size/number blade according to purpose and anatomical region • Handling of Surgical Blade, placement and removal from BP Handle • Describe Principles of Surgical Incision • Describe principles of Incision & Drainage • Describe Principles of Flap Design	
Week-7 Oral & Maxillofacial Trauma		Mode of Delivery: DEMONSTRATION,C BL
 You should be able to	• Describe reduction & fixation techniques • Make Eye-lets with wire & wire handling • Perform Maxillo-Mandibular Fixation on Models + Assignment • Placement of arch bar on models • Radiological interpretation of Trauma patient • Identification of armamentarium for Major & Minor Surgical Procedures	

Week-8 Ethics		Mode of Delivery: DEMONSTRATION
 You should be able to	• Describe the components of Informed Consent • Explain the Basic pillars of medical ethics • Perform a visit to operation theatre and demonstrate infection prevention measures. • Explain Needle stick injury	
Week-9 Assessment week		Mode of Delivery: DEMONSTRATION
 You should be able to	• Complete and Submit LOG BOOKS • Submit Assignments • End of Rotation Ward Test	

Total no of weeks.	Mode of Assessment
9	(DOPs, OSCE Mini-CEX, VIVA)

RESEARCH/ICT

Session-1 Introduction to Biostatistics		Mode Of Delivery: Lecture + Handson experience using statistical software.
 You should be able to	• Understand concepts/terminologies used in statistics and the branches of statistics • Understand Data, its types and different collection methods	
Session-2 Introduction to SPSS-statistical Package.		Mode Of Delivery: Lecture + Handson experience using statistical software.

 You should be able to	● Familiarity with SPSS environment ● Data entry of Qualitative and Quantitative variables ● Transformation of Continuous data into categories	
Session-3 Organizing and Displaying Data for Categorical & Continuous Variables		Mode Of Delivery: Lecture + Handson experience using statistical software.
 You should be able to	● Construct frequency tables, cumulative and relative frequency ● Construct different graphs for categorical variables, e.g. pie chart, bar chart, column chart ● Interpret frequency table and graphs	
Session-4 Measures of Central Tendency (MCT) & Dispersion		Mode Of Delivery: Lecture + Handson experience using statistical software.
 You should be able to	● Differentiate methods of data summarization ● Understand and compute: Mean, Median & Mode ● Understand Measures of Dispersion (Range, Interquartile Range, Variance and Standard deviation, concept of coefficient of variation)	



Session-5 Inferential Statistics Normal Distribution Hypothesis Testing (one sample, Independent & Paired t test)		Mode Of Delivery: Lecture + Handson experience using statistical software.
 You should be able to	• Differentiate between population and sample • Test Normality using SPSS • Understand the concept of Inferential Statistics • Understand the concept of Hypothesis Testing • Apply these Tests using SPSS • Interpret findings	
Session-6 Test/Quiz		Mode Of Delivery: BCQ, SAQ, Scenario based problems + Handson using statistical software.

Total no of sessions.	Mode of Assessment
6	Submission of Assignment: Hardcopy



SAMPLE TIME TABLE



DENTAL COLLEGE HITEC – INSTITUTE OF MEDICAL SCIENCES

RECORD FORMAT
WEEKLY TIME TABLE

Final year BDS (2026-2027)

DAY/DATE	8:30 - 9:15	9:15 – 10:00	Break 10:00-10:20	10:20 – 03:30	2:00 – 3:30
MONDAY 08-06-26	Orthodontics (LGIS) Diagnostic aids in Orthodontics (Dr. Hasnain)	Operative Dentistry (LGIS) Introduction to endodontics (Prof Beenish)	-	CLINICAL TRAINING /WARD ROTATION GROUP-C (Operative Dentistry) (Demonstration) Filling instruments Clinical Quota (Dr Beenish + Dr Sharaz + Dr Sumyyia + Dr Mohsin)	-
TUESDAY 09-06-26	Operative Dentistry (LGIS) Tooth morphology (Prof Beenish)	OMFS(LGIS) Trauma Dentoalveolar Fractures (Dr Fatima Khattak)	-	GROUP- D (Prosthodontics) (Demonstration)Recording of maxillomandibular relation Clinical Quota. (Dr Aamir + Dr Sameen + Dr Muqheet)	Behavior Session
WEDNESDAY 10-06-26	Pedodontics (LGIS) Pulp Therapy in primary teeth (Dr. Amna Riaz)	Prosthodontics (LGIS) Recording of impression for edentulous patient (Dr. Sameen)	-	GROUP-A (Orthodontics) (Demonstration) Cast analysis (Dr. Asim)	Research
				GROUP-B (OMFS) (Demonstration) Radiological Interpretation of impacted teeth Clinical Quotas. (Dr Maimoona+ Dr Fatima+ Dr Sadia, Dr Salman, Dr Bilal)	
THURSDAY 11-06-26	Prosthodontics (LGIS) Recording of impression for edentulous patient (Dr. Sameen)	Orthodontics (LGIS) Diagnostic aids in Orthodontics (Dr. Hasnain)	10:00 – 10:50 (Mentoring Session)	(SGD)/ CBL 2:00-3:30 (Operative) Tooth morphology (Prosthodontics) Ethics and professionalism (Ortho) Indications of different radiographs used for orthodontic diagnosis (OMFS) Pillars of medical ethics & Informed Consent	
FRIDAY 12-06-26	OMFS (LGIS) Soft tissue injuries (Dr Fatima Khattak)	OMFS (LGIS) Pathology (Biopsy) Dr Maimoona		1:00 – 2:00 Jumma Break	RESEARCH PROJECT GUIDANCE

Weekly Time Table (08th June 2026 to 14th June 2026)

(Week-14)

Group: A = Roll #200 - 212;

Group: B = Roll #;213 – 223;

Group: C = Roll # 224 – 234;

Group: D = Roll # 235 – 248 & 125;

Prof. Dr. Beenish Qureshi

Prof. Dr. Waheed Ullah

Dr. Aamir Rafique

Dr. Maimoona Siddiq

Dr Amna Riaz

Document Code	Version No	Date	Page
DDE-POL01-F-02	01	01-09-2023	1/21



LEARNING RESOURCES

RECOMMENDED TEXTBOOKS & ONLINE RESOURCES FOR BDS STUDY




1 OPERATIVE DENTISTRY

- Sturdevant's Art & Science of Operative Dentistry
- Cohan's Pathways of Pulp
- Grossman Endodontic Practice
- Contemporary Fixed Prosthodontics Rosenstiel
- Paediatric Dentistry, Richard Welbury



2 ORAL & MAXILLOFACIAL SURGERY

- Contemporary Oral and Maxillofacial Surgery, 7th Edition, James R. Hupp
- Handbook of Local Anesthesia, 7th Edition, Stanley F. Malamed
- Fractures of the Facial Skeleton, 2nd Edition, Peter Banks
- Scully's Medical Problems in Dentistry, 7th Edition, Crispian Scully



ONLINE RESOURCES

<https://www.sciencedirect.com/>

<https://emedicine.medscape.com/>

3 ORTHODONTICS

- Contemporary Orthodontics William R. Proffit, 7th Edition.
- An Introduction to Orthodontics Laura Mitchell



4 PROSTHODONTICS

- Prosthodontic treatment for edentulous patients, Thirteen Edition by Zarb and Hobkirk
- McCracken's Removable Partial Prosthodontics, Thirteen Edition
- Contemporary Fixed Prosthodontics Rosenstiel



5 PAEDIATRIC DENTISTRY

- Welbury 5th Edition Paediatric Dentistry
- McDonald and Avery's Dentistry for Child and Adolescent, 5th Edition





E-BOOKS & JOURNALS
Access high quality e-books and peer reviewed journals.



CLINICAL CASES
Explore clinical cases and videos for better learning.



VIDEO LECTURES
Watch video lectures and procedural demonstrations.



STAY UPDATED
Follow latest guidelines and research updates.



RELIABLE SOURCES
Use trusted platforms for evidence based study.



"The more you learn today, the better you treat tomorrow."





Feedback on the study guide:

**We value your feedback and will use it for improvement of this study guide. Kindly
provide
feedback at the given email address: dental.education@hitec-ims.edu.pk**