



**Institute of Dentistry
CMH Lahore Medical College**

Study Guide

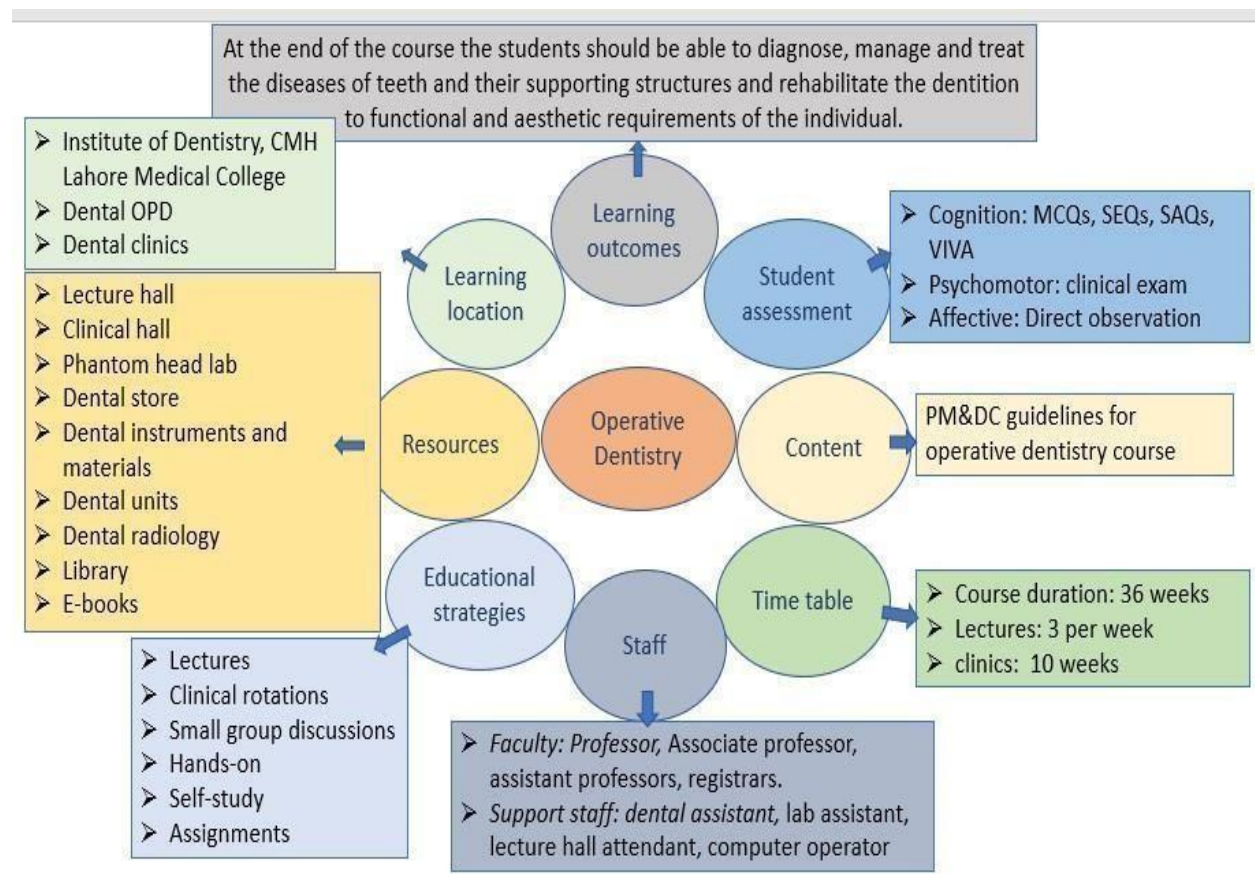
**Department of Operative & Pediatric Dentistry
(2022 – 2023)**

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INTRODUCTION TO OPERATIVE DENTISTRY/ PEDIATRIC DENTISTRY

This is a subject which includes diagnosis, prevention and treatment of the problems and conditions of natural teeth vital or non-vital so as to preserve natural dentition and restore it to the best state of health, function and aesthetics. It has been recognized as the foundation of dentistry and base from which most other aspects of dentistry evolved.

Curricular Map of Operative Dentistry/ Pediatric Dentistry



Resources

- Teaching resources
- Supporting staff
- Infrastructure resources

Teaching Resources

<u>OPERATIVE DENTISTRY</u>			
Sr. #.	Faculty Name	Designation as per PM & DC certificate	Qualification
1	Prof. Dr. Nasir Saleem	Professor	BDS, FCPS, MSc
2	Dr. Um e Rubab Sherazi	Associate professor	BDS, FCPS
3	Dr. Sobia Masood Tirmazi	Associate professor	BDS, FCPS
4	Col. Dr. Imran Khan	Assistant Professor	BDS, FCPS
5	Dr. Kanza Iqbal Mir	Senior Registrar	BDS, FCPS
6	Dr. Sannan Qayyum	Demonstrator	BDS
7	Dr. Rabya Masood	Demonstrator	BDS
8	Dr. Mahnoor Sikander	Demonstrator	BDS
9	Dr Baneen Khawar	Post graduate resident	BDS
10	Dr. Syed Moiz Ali	Post graduate resident	BDS
11	Dr. Sajjad Hussain	Post graduate resident	BDS
12	Dr. Murvah Assad	Post graduate resident	BDS
13	Dr. Unzilla Abbas	Post graduate resident	BDS
14	Dr. Salsabeel Amjad	Post graduate resident	BDS
15	Dr Munsara	Post graduate resident	BDS
16	Dr. Mahum Mansoor	Post graduate resident	BDS
17	Dr. Amber Jahangir	Post graduate resident	BDS
18	Dr. Haseeb Hassan	Post graduate resident	BDS
19	Dr. M. Ahsan	Post graduate resident	BDS
20	Dr. Malika Sundus	Post graduate resident	BDS

21	Dr Said Ali	Post graduate resident	BDS
22	Dr Hassan Yousaf	Post graduate resident	BDS

<u>PEDIATRIC DENTISTRY</u>			
1	Prof. Dr. Arham Nawaz Chohan	HOD	BDS, MSc, FADI, FPFA
2	Dr. Musa Ejaz Farrukh	Demonstrator	BDS
3	Dr. Memoona Javed	Demonstrator	BDS

Supporting Staff

Operative Dentistry		
1	Waqas Naseem	Computer Operator
2	Salma Amanat	Dental Surgery Assistant
3	Zainab Bashir	Dental Surgery Assistant
4	Waqar Afzal	Dental Surgery Assistant
5	Inbasat Awan	Dental Surgery Assistant
6	Muhammad Asif	Dental Surgery Assistant
7	Amir Gulzar	Dental Surgery Assistant
8	Abida Shehbaz	Dental Surgery Assistant
9	Zulfiqar Ali	Dental Surgery Assistant
10	Ayesha Qasim	Dental Surgery Assistant
11	M. Khawar	Dental Surgery Assistant
12	Mussarat Rafuique	Receptionist
13	Iqra Zafar	Dental Surgery Assistant
14	Tasnim Ahmad	Dental Surgery Assistant
15	Ayaz Khan	Dental Surgery Assistant
16	Hamza Ali Bukhari	Lab Attendant
17	Sohail Akhtar	Peon
PEDIATRIC DENTISTRY		
17	Abid Rafique	Computer Operator
18	Umber Chohan	Dental Hygienist
19	Usman Butt	Dental Surgery Assistant
20	Usman Shoukat	Dental Surgery Assistant
21	Waqar Hussain	Lab Attendant
22	Abdul Wahab	Peon

Sr No.	Infrastructure Resources	Quantity
1	Operating Hall <ul style="list-style-type: none"> ● Operative Dentistry ● Pediatric Dentistry 	<ul style="list-style-type: none"> ● 01 ● 06 surgeries
2	Dental Units <ul style="list-style-type: none"> ● Operative Dentistry ● Pediatric Dentistry 	<ul style="list-style-type: none"> ● 21 ● 06
3	Dental Stools <ul style="list-style-type: none"> ● Operative Dentistry ● Pediatric Dentistry 	<ul style="list-style-type: none"> ● 21 ● 06
4	Specialist Clinic	<ul style="list-style-type: none"> ● 01
5	Phantom Head labs <ul style="list-style-type: none"> ● Lab A – Phantom Head ● Lab B – Phantom Head 	<ul style="list-style-type: none"> ● 02 ● 20 ● 20
6	Reception	<ul style="list-style-type: none"> ● 01
7	Instrument Delivery Room	<ul style="list-style-type: none"> ● 01
8	Locker Room	<ul style="list-style-type: none"> ● 01
9	Conference Room	<ul style="list-style-type: none"> ● 01
10	Faculty Offices	<ul style="list-style-type: none"> ● 05

Resources & Facilities:

<u>Hands- on Activities / Practical</u>	Students will be involved in Practical sessions and hands-on activities that link with the blood module to enhance the learning
<u>Clinical department</u>	Utilize the clinical department to practice on patients under direct supervision.
<u>Skills Lab</u>	A skills lab provides the simulated learning experience to learn the basic skills and procedures. This helps patients
<u>Videos</u>	Video familiarize the student with the procedures and protocols to assist patients
<u>Computer Lab/CSs/DVDs/ Internet Resources:</u>	To increase the knowledge, students should utilize the available internet resources and CDs/ DVDs. This will be an additional advantage to increase learning.
<u>Self-Learning</u>	Self-Learning is scheduled to search for information to solve cases, read through different resources and discuss among the peers and with the faculty to clarify the concepts.

TEACHING AND LEARNING STRATEGIES

Multiple educational methods are used consisting of interactive lectures, group discussions, clinical training/practical, manual dexterity sessions and self-study.

(i) Methods for Achieving Cognitive Objectives

- Diagnosis and treatment planning
- Interactive lectures using audio visual aids through power point presentation
- Group discussions both large groups and small groups
- Tutorials
- Collaborative learning
- Self-study and reading from reference resources recommended.

(ii) Methods for Achieving Psychomotor Objectives

- Clinical Demonstrations
- Hands-on Clinical Training
- Individual Clinical Supervision

(iii) Methods for Achieving Effective Objectives

- Interaction with peers, group members, teachers, support staff etc.
- Group discussions (small and large)
- Oral presentations by the student

LEARNING METHODOLOGIES

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

- Interactive Lectures
- Clinical Demonstrations
- Small Group Discussions
- Case- Based Learning
- Clinical Rotations
- Individual Skills Sessions
- E- Learning
- Self- Directed Study

INTERACTIVE LECTURES

In a large group, the lecturer introduces a topic or common clinical conditions and explains the underlying phenomena through questions, pictures, videos of patients, interviews, exercise etc. students are actively involved in the learning process.

CLINICAL DEMONSTRATIONS:

In small groups, students observe patients with signs and symptoms in hospital or clinical settings. This helps students to relate knowledge of basic and clinical science of the relevant module.

SMALL GROUP DISCUSSIONS (SGD)

This format helps students to clarify concepts and acquire skills or attitudes. Sessions are structured with the help of specific exercises such as patient cases, interviews or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials and self-study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

CASE- BASED LEARNING

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 module.

CLINICAL ROTATIONS (CR)

Clinical rotations for clinical subjects like Operative Dentistry, Orthodontics, Prosthodontics and Oral Surgery are scheduled for student learning.

INDIVIDUAL SKILLS SESSION

Skills relevant to each module are observed and practiced where applicable in the skills laboratory.

SELF DIRECTED STUDY

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

E- LEARNING

E-Learning is a strategy by which learning occurs through the utilization of electronic media, typically the Internet. The basic aspects of medical professionalism and ethics will be addressed through and E-Learning course.

CURRICULUM IMPLEMENTATION

Curriculum implementation refers to putting into practice the official document including course content, objectives, learning and teaching strategies. Implementation process helps the learner to achieve knowledge, skills and attitudes required of the learning tasks. Learners are a pertinent component of the implementation process. Implementation occurs when the learner achieves the intended learning experiences, knowledge, ideas, skills and attitudes which are aimed to make the learner an effective part of the society. Curriculum implementation also refers to the stage at which curriculum is put into effect. There has to be an implementing agent as well. Teacher is an important part of this process and implementation of the curriculum is the way the teacher selects and utilizes various components of the curriculum. Implementation occurs when the teacher's formulated course content, teacher's personality and teaching and learning environment interact with the learners.

Therefore, curriculum implementation is how the officially planned course of study is translated and reflected by the teacher into schemes of work, lesson plans, syllabus and resources are effectively transferred to the learners. Curriculum implementation can be affected by certain factors such as teachers, learners, learning environment, resource materials and facilities, culture and ideology, instructional supervision and assessments.

Personnel involved in teaching and facilitation:

Lectures delivery by:

Operative Dentistry

- Prof. Dr Muhammad Nasir Saleem
- Dr. Um e Rubab sherazi
- Dr. Sobia Masood Tirmazi
- Col. Dr. Imran Khan

Pediatric Dentistry

- Prof. Dr. Arham Nawaz Chohan

Registrars and PGRs for clinics/practical and small group discussion sessions:

Operative Dentistry

- Dr Kanza Iqbal Mir
- Dr Sannan Qayyum
- Dr Rabya Masood
- Dr. Mahnoor Sikander
- Dr Munsera
- Dr. Ahsen
- Dr Murvah Assad
- Dr. Unzilla Abbas
- Dr. Salsabeel Amjad
- Dr. Baneen Khawar
- Dr. Mahum Mansoor
- Dr. Amber Jahangir
- Dr. Haseeb Hassan
- Dr. Mahwash Alavi
- Dr Hassan Yousaf
- Dr. Malika Sundas
- Dr Said Ali
- Dr Sajjad Hussain
- Dr. Syed Moiz Ali

I.

II.

Pediatric Dentistry

- Dr. Memoona Javed
- Dr. Musa Ejaz Farrukh

III.

Support staff:

Operative Dentistry

- Dental assistants: 14
- Lab attendant: 01
- Peon: 01

Pediatric Dentistry

- Dental assistants: 02
- Dental Hygienist: 01
- Lab Attendant: 01
- Peon: 01

IV. Computer assistant:

01 (Operative Dentistry)

01 (Pediatric Dentistry)

Time frame

Course duration:

- Lectures: 30 weeks
- Clinical rotations: 08 weeks per rotation

Lectures:

Operative Dentistry

- Monday (8:00 to 8:50am)
- Friday: (8:50 to 9:40 am)

Pediatric Dentistry

- Wednesday: (8:50 to 9:40 am)
- Friday: (8:00 to 8:50am)

Practical/Clinical training:

- Monday – Friday (10:00 to 3:00 pm)
[1PM – 2PM Jumma Prayers Break]

Self-study:

- 25 hours during the course

Course outline

Section I : Operative Dentistry

This subject introduces the students to diagnosis and formulating treatment planning with integrated management of diseases of teeth and the rehabilitation of the dentition to functional and aesthetic requirements of the individual. This section familiarizes students with a number of key themes and subjects regarding different types of direct restorative materials and techniques used in dentistry. It is designed to provide detailed information regarding historical background, types, properties, biological consideration, clinical applications, limitations and selection criteria of direct restorative materials. The aim of this section is to allow students to gain didactic knowledge and develop psychomotor skills.

This subject deals with the diseases of the dental pulp and tissues surrounding the roots of the teeth. Endodontic treatment or root canal treatment, treats the soft pulp tissues inside the tooth. It introduces students to different types of endodontic materials classified according to their intended clinical uses. It involves the study of composition, properties and mode of application of various disinfectants, lubricants, sealers and obturating materials used in endodontics.

Section II : Pediatric Dentistry

The subject of Pediatric Dentistry deals with diagnosis and comprehensive dental/oral management of children from birth through adolescence including those with special care needs. The major focus is on preventive strategies to reduce the burden of dental diseases in children, who make up 40% of the population in the country. The Department's philosophy is centered on evidence-based treatment planning and comprehensive patient care. Guidance is provided to the students in behavior management of children through various psychological behavior management techniques. The students are also familiarized with pharmaceutical behavioral management techniques such as minimal sedation and complete oral rehabilitation under GA.

Didactic and clinical training is imparted in the areas of pulp therapy in primary and young permanent teeth, and restoration of primary and young permanent teeth including full crown coverage through classical and latest options available. Prevention and management of dental trauma to primary and young permanent teeth is also taught. Management of various deleterious oral habits in children and prevention of its detrimental sequelae are also taught and practiced.

The students are trained in minor oral surgery concentrating mainly on safe administration of local anesthesia and extraction techniques in young children. Various areas of interceptive orthodontics are also taught focusing on space maintenance and space maintainers after immature loss of primary teeth.

The students are also taught about developmental dental disturbances, periodontal diseases in children, oral manifestations of infection diseases in children, dental management of intellectually challenged children and those with systemic diseases.

The students are educated on how to manage various dental emergencies in children emphasizing focus on the whole child rather than just the dental injury; and managing the children's behavior and parental concerns at those critical times.

OPERATIVE DENTISTRY

Topics & Objectives	Faculty	Learning Domain (CPA)	Learning Strategy	Assessment						
SECTION 1 : CONSERVATIVE DENTISTRY				Clinical	Viva	OSPE	NUMS MCQs	NUMS SEQs	%	
INTRODUCTION Clinical significance of dental anatomy and histology	Prof. Dr. Nasir Saleem	C	Lecture/ Small Group Discussion		✓		1	1		
CARIOLOGY - Define dental caries - Discuss etiology and clinical significance of dental caries - Identify risk factors for caries		CPA	Lecture/ Small Group Discussion	✓	✓	✓	3			
- Discuss the classification of dental caries - Enlist the methods of caries control by medical model - Diagnose and discuss the different treatment strategies and clinical considerations in caries prevention			Lecture/ Small Group Discussion/ Practical	✓	✓	✓				

<p>STERILIZATION & INFECTION CONTROL</p> <ul style="list-style-type: none"> - Enlist exposure risks and effects of infection in Dentistry - Overview of aseptic techniques, methods of sterilization - State the recommended CDC guidelines for infection control 	<p>Dr. Rubab Sherazi</p>	<p>CPA</p>	<p>Lecture/S mall Group Discussion/ Practical</p>	<p>✓</p>		<p>✓</p>	<p>1</p>		
<p>DENTAL BIOMATERIALS</p> <ul style="list-style-type: none"> - Discuss the optimal characteristics and implications of dental biomaterials 	<p>Dr. Rubab Sherazi</p>	<p>CPA</p>	<p>Lecture/S mall Group Discussion/ Practical</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>2</p>		
<p>CAVITY PREPARATIONS AND RESTORATIONS FOR DENTAL AMALGAM</p> <ul style="list-style-type: none"> - Classification and clinical considerations for dental amalgam, including applied chemistry and material properties - Discuss and demonstrate various clinical techniques for amalgam restorations (CLASS 1 and 2) - Discuss and demonstrate the fundamentals/ steps of tooth preparation for amalgam restorations - Highlight the significance of 	<p>Prof. Dr. Nasir Saleem</p>	<p>CPA</p>	<p>Lecture/S mall Group Discussion/ Practical</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>3</p>		

mercury toxicity and amalgam waste hazards									
COMPLEX AMALGAM RESTORATIONS - Define pin-retained restoration - Enlist indications /contraindications of pin retained restorations - Discuss techniques of pin placement, factors affecting retention of pins and clinical considerations for pin placement.	Prof. Dr. Nasir Saleem	C	Lecture/ Small Group Discussion		√	√	1		
CAVITY PREPARATIONS AND RESTORATIONS FOR DENTAL COMPOSITE - Discuss material properties and applied chemistry for dental composite - Classify dental composite - Discuss the importance of shade matching restorative dentistry - Discuss and demonstrate fundamentals of tooth preparation for composite restorations - Discuss and highlight important concepts in enamel and dentine adhesion, with respect to composite restorations in dental clinic	Dr. Rubab Sherazi	CPA	Lecture/S mall Group Discussion/ Practical	√	√	√	3		

<p>OCCLUSION</p> <ul style="list-style-type: none"> - Define occlusion - Define ideal occlusion, state its significance - Define following terms : CR, maximum intercuspation, CO - Explain concepts of unilateral and bilateral balanced occlusion - Explain mutually protected occlusion, state its features - Explain occlusal interferences - Explain pathognomic occlusion 	<p>Prof. Dr. Nasir Saleem</p>	<p>C</p>	<p>Lecture / Case based Learning / Small Group Discussion</p>		<p>✓</p>		<p>1</p>		
<p>NON-CARIOUS CERVICAL LESIONS</p> <ul style="list-style-type: none"> - Discuss classification of NCCLs based on etiology - Discuss and highlight different features of NCCLs : abrasion, erosion, abfraction, attrition - Diagnose NCCLs, discuss and demonstrate management and treatment of NCCLs/tooth wear 	<p>Col. Dr. Imran Khan</p>	<p>CPA</p>	<p>Lecture/Case Based Learning/Small Group Discussion/ Practical</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>1</p>		
<p>TOOTH DISCOLOURATION AND ADDITIONAL AESTHETIC PROCEDURES</p> <ul style="list-style-type: none"> - Identify different types of discolouration of teeth - Describe different techniques used to treat discoloured teeth - Explain Microabrasion - Explain Macroabrasion - Explain different 	<p>Dr.Sobia Masood</p>	<p>C</p>	<p>Lecture/Small Group Discussion/ Case Based Discussion</p>		<p>✓</p>	<p>✓</p>	<p>2</p>	<p>1</p>	

types of bleaching techniques : vital/ non-vital bleaching techniques								
RADIOLOGY - Discuss basic principles and interpretations of dental radiography - Discuss the use and implications of various radiographs : periapical, bitewing, occlusal, OPG, CBCT - Identify and rectify errors in radiographs	Dr. Rubab Sherazi	CPA	Lecture/ Patient Interaction / Small Group Discussion	√		√	1	
MANAGEMENT OF MEDICALLY COMPROMISED PATIENTS	Dr. Rubab Sherazi	CPA	Lecture/ Patient Interaction / Small Group Discussion			√	1	
SECTION 2 : INDIRECT SINGLE TOOTH RESTORATION								1
INLAY AND ONLAY - Differentiate between inlay and onlay - Enlist its advantages and disadvantages -Enlist indications for inlays and onlays -Discuss steps of preparation for inlays and onlays -Discuss steps of cementation for these	Prof. Dr. Nasir Saleem	C	Lecture/S mall Group Discussion			√	1	
veneers - Enlist indications/ contraindications of veneers - Enlist different types of veneers, clinical technique and materials used in fabrication - Describe and demonstrate different	Prof. Dr. Nasir Saleem	CPA	Lecture/S mall Group Discussion/ Demonstration			√	√	2

types of veneer preparation on manikin									
DIGITAL DENTISTRY (CAD CAM Restorations) - Define CAD -Define CAM -Discuss the need for CAD CAM in clinical dentistry -Discuss the application of CAD CAM -Enlist its advantages and disadvantages - Discuss the steps and materials used in CAD CAM	Col. Dr. Imran Khan	C	Lecture/ Case Based Discussion		√		1		
CAST POST AND CORE RESTORATIONS	Dr. Sobia Masood	C	Lecture/ Small Group Discussion		√		1		
SECTION : ENDODONTICS									
DIAGNOSIS AND TREATMENT PLANNING - Evaluate a patient when taking history and clinical examination - Discuss and employ the use of various diagnostic aids - Demonstrate how to diagnose pulpal and periapical diagnosis by combining clinical and radiographic examination - Plan and formulate a treatment in a sequential manner according to the problem list	Prof. Dr. Nasir Saleem	CPA	Lecture/S mall Group Discussion/ Patient Interaction	√	√	√	1	1	
BIOLOGY OF DENTAL PULP					√				

<p>- Explain the structure and function of dentin- pulp complex</p> <p>- Discuss and highlight pulpal reaction to dental caries, restorative material and treatment</p>	<p>Col. Dr. Imran Khan</p>	<p>C</p>	<p>Lecture</p>				<p>1</p>		
<p>CLINICAL CLASSIFICATION AND PATHOBIOLOGY OF PULPAL AND PERIRADICULAR TISSUES</p> <p>- Classify pulpal and periradicular diseases</p> <p>- Discuss in detail classification, diagnosis and management of pulpal conditions : normal pulp, reversible pulpitis, irreversible pulpitis and pulpal necrosis</p> <p>- Discuss in detail classification, diagnosis and management of periapical conditions : normal periapex, symptomatic apical periodontitis, asymptomatic apical periodontitis, acute apical abscess, chronic apical abscess and condensing osteitis</p>	<p>Prof. Dr. Nasir Saleem</p>	<p>CPA</p>	<p>Lecture/S mall Group Discussion/ Patient Interaction</p>		<p>√</p>	<p>√</p>	<p>3</p>		
<p>OTHER PATHOSIS AFFECTING PULP TISSUES AND MIMICKING PULPAL DISEASES</p> <p>ENDO-PERIO LESIONS :</p> <p>-Name pathways of communication between the dental pulp and periodontium</p>			<p>Lecture</p>		<p>√</p>				

<p>-Describe effects of pulpal diseases and endodontic procedures on periodontium -Describe effects of periodontal diseases on the pulp -Demonstrate how to diagnose endodontic-periodontal lesions, give its classification and differentials</p> <p>RESORPTION : - Differentiate between internal and external resorption based on clinical signs, use of diagnostic aids. - Discuss treatment of internal and external resorption</p> <p>CALCIFIC METAMORPHOSIS</p> <p>NON ODONTOGENIC TOOTHACHE - Enlist the different non-odontogenic diseases mimicking pulpal and periapical diseases - Enlist the differentiating features that help in diagnosis non-odontogenic diseases</p>	<p>Col. Dr. Imran Khan</p> <p>Prof. Dr. Nasir Saleem</p> <p>Dr. Rubab Sherazi</p>	<p>CA</p> <p>CPA</p>				<p>2</p> <p>2</p>		
<p>PREPARATION FOR ENDODONTIC TREATMENT - Know the use of endodontic instruments - Identify significance of isolation while performing RCT - Know the significance of local anesthesia and</p>	<p>Prof. Dr. Nasir Saleem</p>		<p>Lecture/S mall Group Discussion/ Demonstration</p>		<p>√</p>			

effective pain control measures in endodontics									
<p>ENDODONTIC THERAPY</p> <p>ENDODONTIC ACCESS AND LENGTH DETERMINATION</p> <ul style="list-style-type: none"> - Know the significance of root canal anatomy during access opening - Discuss and highlight significance of straight line access in endodontics - Discuss the significance and methods of working length determination in endodontics <p>CLEANING AND SHAPING</p> <ul style="list-style-type: none"> -Define cleaning and shaping (chemo-mechanical debridement) , focusing on different techniques for cleaning and shaping - Discuss use of irrigants and intracanal medicaments in cleaning and shaping <p>OBTURATION</p> <ul style="list-style-type: none"> - Define obturation -Discuss properties of sealers used in obturation - Discuss materials used in obturation, focusing on various obturation techniques 	Prof. Dr. Nasir Saleem	CPA	Lecture/ Small Group Discussion/ Demonstration		√		3	1	
RESTORATION OF ENDODONTICALLY TREATED TEETH			Lecture/ Small Group		√				

<ul style="list-style-type: none"> - Know the criteria for a restorable tooth - Discuss the complications associated with endodontically treated teeth - Enlist structural, esthetic and restorative considerations in endo-treated teeth - Discuss the use of post in endo- treated teeth 	Dr. Rubab Sherazi	CA	Discussion				3		
<p>EVALUATION OF ENDODONTIC OUTCOMES AND OTHER TREATMENT MODALITIES</p> <ul style="list-style-type: none"> - Evaluation of endodontic outcomes based on restorability and significance of good coronal and apical seal - Know and discuss non- surgical retreatment, focusing on identifying when to initiate retreatment - Define periradicular surgery/ apical microsurgery , enlist its indications and contraindications - Know/discuss the concept of revascularization -Geriatric Endodontics 	Dr. Rubab Sherazi	C	Lecture/ Small Group Discussion		√		3	1	
ENDODONTIC EMERGENCIES	Dr. Sobia Masood						3		
SECTION 4 : PAEDODONTICS									
CHILD MANAGEMENT IN			Lecture/ Small		√	√			

<p>DENTAL PRACTICE - Treatment planning and factors to be considered while treating pediatric patients</p> <p>CLINICAL DIAGNOSIS OF PEDIATRIC DENTAL DISEASES - Early childhood disease - Rampant caries - Fluorosis - Congenital dental anomalies</p>	<p>Prof. Dr. Arham Chohan</p>	<p>CA</p>	<p>Group Discussion, Case Based Discussion</p>				<p>4</p>	<p>1</p>	
<p>PREVENTION OF DENTAL DISEASES - Significance of prenatal counseling - define oral prophylaxis and discuss its importance - Discuss preventive measures for caries control in children : fluoride administration/ dietary management/ counseling/ home care</p>	<p>Prof. Dr. Arham Chohan</p>	<p>CPA</p>			<p>√</p>	<p>√</p>	<p>3</p>		
<p>TREATMENT MODALITIES FOR DECIDUOUS TEETH - Restorative dentistry for primary dentition using composite, compomers, glass ionomers and stainless steel crowns</p> <p>- Vital and non vital pulp therapy for primary and young permanent teeth: apexification, apexogenesis, pulpotomy and pulpectomy</p>	<p>Prof. Dr. Arham Chohan</p>	<p>CPA</p>	<p>Lecture/S mall Group Discussion/ Patient Interaction</p>		<p>√</p>	<p>√</p>	<p>3</p>	<p>1</p>	

<p>CHILDHOOD IMPAIRMENTS AND DISABILITIES</p> <p>- Discuss and highlight significance of different types of impairment in management of Pediatric patients</p> <p>> intellectual impairment</p> <p>> Physical impairment</p> <p>> Deafness/ Hearing Impairment</p>	<p>Prof. Dr. Arham Chohan</p>	<p>C</p>	<p>Lecture/ Case Based Discussion</p>		<p>✓</p>	<p>✓</p>			
<p>RADIOLOGY IN PAEDODONTICS</p>	<p>Prof. Dr. Arham Chohan</p>	<p>CPA</p>	<p>Lecture/S mall Group Discussion/ Patient Interaction</p>		<p>✓</p>		<p>1</p>		
<p>INJURY TO PRIMARY AND PERMANENT TEETH</p> <p>- Discuss different types of dental injuries to primary and permanent dentition, focusing on management of such cases</p>	<p>Prof. Dr. Arham Chohan</p>	<p>CPA</p>	<p>Lecture/S mall Group Discussion/ Patient Interaction</p>		<p>✓</p>		<p>3</p>		
<p>ANESTHESIA AND SEDATION</p> <p>- Define pain control and use of local anesthesia in Pediatric patients</p> <p>- Indicate use of nitrous oxide as sedation for Pediatric patients , highlighting its significance and efficacy</p>	<p>Prof. Dr. Arham Chohan</p>	<p>CPA</p>	<p>Lecture/ Small Group Discussion/ Demonstration/ Patient Interaction</p>		<p>✓</p>	<p>✓</p>	<p>1</p>		

VIVA (70 marks)		Practical/Clinical (90 marks)			Total
Examiner 1	Examiner 2	History Taking	Operative Schedule	OSCE	160 marks
35 marks	35 marks	20	50	20	

Summative assessment methods and policies

Internal Assessment

INTERNAL ASSESSMENT - THEORY	
INTERNAL ASSESSMENT WEIGHTING: 20%	
Exams	Weightings
Attendance in Lectures:	10%
a. ≥90% = 10%	
b. 80-89% = 7%	
c. 75-79% = 5%	
End of Block/ clinical rotation (theory) Examination	45%
Continuous assessment (average score of all tests attempted after every learning session during the academic year)	20%
Pre-Annual Exam	25%
Total	100%
INTERNAL ASSESSMENT STRUCTURE - PRACTICAL	
INTERNAL ASSESSMENT WEIGHTING: 20%	
Exams	Weightings
Attendance in Practicals:	10%
a. ≥90% = 10%	
b. 80-89% = 7%	
c. 75-79% = 5%	
*End of Block/ clinical rotation (OSCE) Examination	45%
*Continuous assessment of practical/ clinical skills and attitude	20%
Pre-Annual Exam	25%
Total	100%

VIVA (70 marks)		Practical/Clinical (90 marks)			Total
Examiner 1	Examiner 2	History Taking	Operative Schedule	OSCE	160 marks
35 marks	35 marks	20	50	20	

Internal Examiner

He/she shall be Professor and Head of Department who has been involved in teaching of the class being examined. Second preference shall be Associate/Assistant Professor who is involved in teaching of the class and posted there for one year. Third preference shall be a recognized Professor of the subject.

External Examiner

He/she shall be a Professor/Associate Professor of a recognized Medical/Dental College or at least an Assistant Professor with three years teaching experience in the relevant subject.

Conflict of Interest

No person shall serve as an examiner whose close relative (wife, husband, son, daughter, adopted son, adopted daughter, grand-son, grand-daughter, brother, sister, niece /nephew, son and daughter- in-law

brother and sister- in-law, parental and maternal uncle and aunt etc.) is appearing in the examination. All examiners likely to serve as an examiner shall render a certificate in compliance to this para.

Paper Setting

- a. Each College / Institute shall forward a set of two question papers as per TOS along with the key for each subject to the Controller of Examinations, at least three months in advance of the annual examination. The question paper as a whole / a question without a comprehensive key shall not be considered towards final paper setting.
- b. The set of question papers shall be prepared by the respective Head of Department (HoD) and furnished to Controller of Examinations through Head of Institution (HoI)
- c. The Controller of Examinations shall approve the faculty for the final paper setting having fair representation of each college / institute.

Paper Assessment

- a. The Controller of Examinations shall approve the faculty for the theory paper marking, to be undertaken in the manner as deemed appropriate.
- b. The Examination Directorate shall coordinate directly with the faculty, earmarked for the paper marking
- c. A student who scores 85% and above marks in any subject shall qualify for distinction in that particular subject.
- d. A fraction in aggregate marks of a subject shall be rounded off to whole number. If it is less than 0.5 then it will be rounded off to the previous whole number while 0.5 or more will be rounded off to the next whole number.

Practical / Clinical Examinations

- a. The Controller of Examiners shall approve the faculty to serve as the internal & external examiners.
- b. The number of external and internal examiners shall be equal.
- c. One external & internal examiner each shall be marked for a group of 100 students.
- d. Candidates may be divided into groups in the clinical and practical examinations and be standardized by incorporating clinical exam
- e. Practical/clinical examination shall be held after the theory examination of the subject but in special cases, it may be held before the theory examination with the approval of the Controller of Examinations. For the purpose of practical/clinical examination, the candidates may be divided into sub groups by the examiners.
- f. The assessment of the practical / clinical examination duly signed by internal & external examiner shall be furnished to the Controller of Examinations within one week of the conclusion of examination

Pass Marks

- a. Pass marks for all subjects less Islamic / Pakistan Studies, shall be 50 % in theory and practical, separately.
- b. Pass marks for Islamic / Pakistan Studies shall be 33 % which, however shall not be counted towards final scoring of the professional examination.
- c. No grace marks shall be allowed to any student in any examination.

Declaration of Result.

Every effort shall be made to declare the result of each examination within one month of the last practical examination or earlier.

Promotion.

No student shall be promoted to the higher classes unless he/she passes all the subjects of the previous class

Re-Totaling.

Any student may apply to the Controller of Examinations on a prescribed form along with the specified fee.

Supplementary Examination.

The interval between a supplementary examination and the previous professional examination shall not be more than two months. There shall be no special supplementary examination

COURSE ADMINISTRATION

Amended-3

Academic Calendar - Final Year BDS Session 2022 – 2023

Weeks	Details	Dates	
		From	To
Start of New Class		02 Jan 2023	
1st Term		02 Jan 2023	14 May 2023
1-8	1 st Term (8/17 Weeks)	02 Jan 2023	26 Feb 2023
9	Sports Week	27 Feb 2023	02 Mar 2023
10-11	1 st Term (2/17 Weeks)	03 Mar 2023	19 Mar 2023
Annual Sports Day		07 Mar 2023 (Tue)	
12	Spring Holidays (1x Week)	20 Mar 2023	26 Mar 2023
13-18	1 st Term (7/17 Weeks)	27 Mar 2023	07 May 2023
Eid ul Fitr		21 – 25 Apr 2023 (Fri-Tue)	
Labour Day		01 May 2023 (Mon)	
19	1st Term Exams (1/17 Weeks)	08 May 2023	14 May 2023
	Operative Dentistry	08 May 2023 (Mon)	
	Orthodontics	09 May 2023 (Tue)	
	Prosthodontics	10 May 2023 (Wed)	
	Oral & Maxillofacial Surgery	11 May 2023 (Thu)	
Paedodontics		12 May 2023 (Fri)	
2nd Term		15 May 2023	01 Oct 2023
20-28	2 nd Term (9/16 Weeks)	15 May 2023	16 July 2023
Eid-ul-Adha (Tentatively)		29 – 30 June 2023 (Thrs-Fri)	
29-32	Summer Holidays (4x Weeks)	17 July 2023	13 Aug 2023
33-37	2 nd Term (5/16 Weeks)	14 Aug 2023	17 Sep 2023
Pakistan Independence Day		14 Aug 2023 (Mon)	
38-39	Pre Annual Exam (2/16 weeks)	18 Sep 2023	01 Oct 2023
	Orthodontics	18 Sep 2023 (Mon)	
	Operative Dentistry	19 Sep 2023 (Tue)	
	Prosthodontics	20 Sep 2023 (Wed)	
	Oral & Maxillofacial Surgery	21 Sep 2023 (Thu)	
	Paedodontics	22 Sep 2023 (Fri)	
OSPE		25 (Mon), 26 (Tue), 27 (Wed), 28 (Thu), 29 (Fri) Sep 2023	
40-41	Prep Leave for Professional Exams (2x Weeks)	02 Oct 2023	15 Oct 2023
NUMS University Annual Exam		16 Oct 2023 onward	

Note:

- Eid-ul-Adha Holidays will be observed from 29th June 2023 to 30 June 2023.

Prepared By: **Mr Muhammad Ali**
Dated: **23rd May 2023**


Dr. Shakila Mushtaq
Assistant Professor
SHaPE

COURSE ADMINISTRATION


Amended-3

Clinical Rotation Plan - Final Year BDS 2022-23 (2019-23)

Dates	Weeks	Prostodontics	Orthodontics	Oral & Maxillofacial Surgery	Operative Dentistry	Paedodontics
02 Jan 2023 to 15 Jan 2023	2	A1, A2, A3, A4	B1, B2, B3, B4	C1, C2, C3, C4	D2, D3, D4	D1
16 Jan 2023 to 29 Jan 2023	2	A1, A2, A3, A4	B1, B2, B3, B4	C1, C2, C3, C4	D1, D3, D4	D2
30 Jan 2023 to 12 Feb 2023	2	A1, A2, A3, A4	B1, B2, B3, B4	C1, C2, C3, C4	D1, D2, D4	D3
13 Feb 2023 to 26 Feb 2023	2	A1, A2, A3, A4	B1, B2, B3, B4	C1, C2, C3, C4	D1, D2, D3	D4
26 Feb 2023 to 02 Mar 2023	Sports Week					
03 Mar 2023 to 19 Mar 2023	2	D1, D2, D3, D4	A1, A2, A3, A4	B1, B2, B3, B4	C2, C3, C4	C1
07 Mar 2023 (Tue)	Annual Sports Day					
20 Mar 2023 - 26 Mar 2023	Spring Holidays					
27 Mar 2023 - 09 Apr 2023	2	D1, D2, D3, D4	A1, A2, A3, A4	B1, B2, B3, B4	C1, C3, C4	C2
10 Apr 2023 - 23 Apr 2023	2	D1, D2, D3, D4	A1, A2, A3, A4	B1, B2, B3, B4	C1, C2, C4	C3
24 Apr 2023 - 07 May 2023	2	D1, D2, D3, D4	A1, A2, A3, A4	B1, B2, B3, B4	C1, C2, C3	C4
21 Apr 2023 - 25 Apr 2023	Eid ul Fitr					
08 May 2023 - 14 May 2023	First Term Exam					
15 May 2023 - 28 May 2023	2	C1, C2, C3, C4	D1, D2, D3, D4	A1, A2, A3, A4	B2, B3, B4	B1
29 May 2023 - 11 Jun 2023	2	C1, C2, C3, C4	D1, D2, D3, D4	A1, A2, A3, A4	B1, B3, B4	B2
12 Jun 2023 - 28 Jun 2023	2	C1, C2, C3, C4	D1, D2, D3, D4	A1, A2, A3, A4	B1, B2, B4	B3
29 Jun 2023 - 30 Jun 2023	Eid ul Adha (Tentatively)					
03 Jul 2023 - 16 Jul 2023	2	C1, C2, C3, C4	D1, D2, D3, D4	A1, A2, A3, A4	B1, B2, B3	B4
17 Jul 2023 - 30 Jul 2023	2	B1, B2, B3, B4	C1, C2, C3, C4	D1, D2, D3, D4	A2, A3, A4	A1
31 Jul 2023 - 13 Aug 2023	2	B1, B2, B3, B4	C1, C2, C3, C4	D1, D2, D3, D4	A1, A3, A4	A2
14 Aug 2023 - 27 Aug 2023	2	B1, B2, B3, B4	C1, C2, C3, C4	D1, D2, D3, D4	A1, A2, A4	A3
14 Aug 2023	Independence Day (Holiday)					
28 Aug 2023 - 17 Sep 2023	3	B1, B2, B3, B4	C1, C2, C3, C4	D1, D2, D3, D4	A1, A2, A3	A4
18 Sep 2023 - 01 Oct 2023	Pre-Annual Exam					
02 Oct 2023 - 15 Oct 2023	Prep Leave for Annual Exam					
16 Oct 2023 - 22 Dec 2023	NUMS Annual Exam					

Note: (i) Eld-ul-Adha Holidays will be observed from 29th June 2023 to 30th June 2023.

Prepared by: Mr Muhammad Ali
Dated: 23-May-23


Dr. Shakila Mushtaq
 Assistant Professor
 SHaPE

Paediatric Dentistry Department

Institute of Dentistry, CMH Lahore Medical College

Lecture Schedule

(Wednesdays 08:50 AM – 09:40 AM)

(Friday 08:00 AM - 08:50 AM)

(Academic Year 2022 - 2023)

Dated 21-8-2023

Sr.	Date	Topic	Lecturer
1	Wednesday, January 4, 2023	Introduction to Paediatric Dentistry	Prof. Dr. Arham Chohan
2	Friday, January 6, 2023	Examination & treatment Planning I	Prof. Dr. Arham Chohan
3	Wednesday, January 11, 2023	Antimicrobials in Pediatric Dental Patients I	Prof. Dr. Arham / Dr. Erum
4	Friday, January 13, 2023	Antimicrobials in Pediatric Dental Patients II	Prof. Dr. Arham / Dr. Erum
5	Wednesday, January 18, 2023	Examination & treatment Planning II	Prof. Dr. Arham Chohan
6	Friday, January 20, 2023	Behavior Management I	Prof. Dr. Arham Chohan
7	Wednesday, January 25, 2023	Behavior Management II	Prof. Dr. Arham Chohan
8	Friday, January 27, 2023	Presentation Discussion	Prof. Dr. Arham / Dr. Musa & Dr. Memoona
9	Wednesday, February 1, 2023	Behavior Management III	Prof. Dr. Arham Chohan
10	Friday, February 3, 2023	Dental Caries in Children	Prof. Dr. Arham Chohan
11	Wednesday, February 8, 2023	Test # 1	Prof. Dr. Arham / Dr. Musa & Dr. Memoona
12	Friday, February 10, 2023	Prevention of Dental Diseases in Children	Prof. Dr. Arham / Dr. Erum
13	Wednesday, February 15, 2023	Local Anesthesia in Children	Prof. Dr. Arham Chohan
14	Friday, February 17, 2023	Local Anesthesia in Children	Prof. Dr. Arham Chohan
15	Wednesday, February 22, 2023	Isolation of Teeth/Use of Rubber Dam in Children	Prof. Dr. Arham Chohan
16	Friday, February 24, 2023	Restorative Dentistry for the Primary Dentition (Dental Fillings) I	Prof. Dr. Arham Chohan
17	Wednesday, March 1, 2023	Restorative Dentistry for the Primary Dentition (Dental Fillings) II	Prof. Dr. Arham Chohan
18	Friday, March 3, 2023	Restorative Dentistry for the Primary Dentition (Dental Fillings) III	Prof. Dr. Arham Chohan
Annual Sports Day (07 Mar 2023)			
19	Wednesday, March 8, 2023	Restorative Dentistry for Primary Dentition (Full Coverage Ant) I	Prof. Dr. Arham Chohan
20	Friday, March 10, 2023	Olympiad 2023	
21	Wednesday, March 15, 2023	Extraction of Primary Teeth I	Prof. Dr. Arham Chohan
22	Friday, March 17, 2023	Discussion Test # 1	Prof. Dr. Arham / Dr. Erum & Dr. Memoona
Spring Holidays (20-26 Mar 2023)			
23	Wednesday, March 29, 2023	Extraction of Primary Teeth II	Prof. Dr. Arham Chohan
24	Friday, March 31, 2023	Pulp therapy for the primary dentition I	Prof. Dr. Arham Chohan
25	Wednesday, April 5, 2023	Pulp therapy for the primary dentition II	Prof. Dr. Arham Chohan
26	Friday, April 7, 2023	Pulp therapy for the primary dentition III	Prof. Dr. Arham Chohan
27	Wednesday, April 12, 2023	Pulp Therapy for Young Permanent Dentition I	Prof. Dr. Arham Chohan
28	Friday, April 14, 2023	Pulp Therapy for Young Permanent Dentition II	Prof. Dr. Arham Chohan
29	Wednesday, April 19, 2023	Development of Occlusion I	Prof. Dr. Arham Chohan
30	Wednesday, April 26, 2023	Development of Occlusion II	Prof. Dr. Arham Chohan

Sr.	Date	Topic	Lecturer
31	Friday, April 28, 2023	Test 2	Prof. Dr. Arham / Dr. Erum / Dr. Musa & Dr. Memoona
32	Wednesday, May 3, 2023	Restorative Dentistry for Primary Dentition (Full Coverage Post) I	Prof. Dr. Arham Chohan
33	Friday, May 5, 2023	Restorative Dentistry for Primary Dentition (Full Coverage Post) II	Prof. Dr. Arham Chohan
34	Wednesday, May 17, 2023	1st Term Exam	Prof. Dr. Arham / Dr. Erum / Dr. Musa & Dr. Memoona
35	Friday, May 19, 2023	Periodontal Diseases in Children	Prof. Dr. Arham / Dr. Erum
36	Wednesday, May 24, 2023	Dental Management of Children with Systemic Diseases	Prof. Dr. Arham / Dr. Memoona
37	Friday, May 26, 2023	Oral Manifestations of Infectious Diseases	Prof. Dr. Arham / Dr. Musa
38	Wednesday, May 31, 2023	Oral Habits	Prof. Dr. Arham / Dr. Memoona
39	Friday, June 2, 2023	Case Discussion	Prof. Dr. Arham Chohan
40	Wednesday, June 7, 2023	Dental Emergencies in Children I	Prof. Dr. Arham / Dr. Musa
41	Friday, June 9, 2023	Dental Emergencies in Children II	Prof. Dr. Arham / Dr. Musa
42	Wednesday, June 14, 2023	Hospital Dentistry I	Prof. Dr. Arham / Dr. Erum
43	Friday, June 16, 2023	Hospital Dentistry II	Prof. Dr. Arham / Dr. Erum
44	Wednesday, June 21, 2023	Space maintenance in primary and mixed dentition I	Prof. Dr. Arham Chohan
45	Friday, June 23, 2023	Space maintenance in primary and mixed dentition II	Prof. Dr. Arham Chohan
Eid Ul Adha Tentatively (28-30 June 2023)			
46	Wednesday, July 5, 2023	Case Discussion	Prof. Dr. Arham Chohan
47	Friday, July 7, 2023	Activity	
48	Wednesday, July 12, 2023	Nitrous Oxide Sedation in Pediatric Dental Patients	Prof. Dr. Arham / Dr. Erum
49	Friday, July 14, 2023	Test # 3	Prof. Dr. Arham / Dr. Erum / Dr. Musa & Dr. Memoona
50	Wednesday, July 19, 2023	Anomalies of Developing Dentition I	Prof. Dr. Arham Chohan
51	Friday, July 21, 2023	Anomalies of Developing Dentition II	Prof. Dr. Arham Chohan
Summer Holidays (24 July - 18 Aug 2023)			
52	Wednesday, August 23, 2023	Dental Trauma in Permanent Dentition I	Prof. Dr. Arham Chohan
53	Friday, August 25, 2023	Operative Lecture	Prof. Dr. Nasir Saleem
54	Wednesday, August 30, 2023	Dental Trauma in Permanent Dentition II	Prof. Dr. Arham Chohan
55	Friday, September 1, 2023	Dental Trauma in Permanent Dentition I	Prof. Dr. Arham Chohan
56	Wednesday, September 6, 2023	Dental Trauma in Permanent Dentition II	Prof. Dr. Arham Chohan
57	Friday, September 8, 2023	Revision / Case Discussion	Prof. Dr. Arham Chohan
58	Wednesday, September 13, 2023	Revision / Case Discussion	Prof. Dr. Arham Chohan
59	Friday, September 15, 2023	Revision / Case Discussion	Prof. Dr. Arham Chohan

Operative Dentistry Department
Final Year BDS (2023)
Small Group Discussion

Discussion Topics

1. Caries Risk Assessment & Formulation of Treatment Plan
2. Diagnosis & Treatment Planning
3. Prescription writing
4. Irrigants & Intra canal Medicaments
5. Restoration of Endodontically Treated Teeth
6. Additional Aesthetic procedures bleaching / macro and micro abrasion

Operative Dentistry Department
Final Year BDS (2023)
Small Group Discussion (Group D)

02 Jan 2023		Orientation Day	
02 Jan 23 to 26 Feb 23	Day/ Date/ Time	Topics	Instructor
Week 2	Thursday 12 Jan 2023 10:30 am to 12:00 pm	SGD- Caries Risk Assessment & Formulation of Treatment Plan	Prof. Dr. Nasir Saleem / Dr. Sannan
Week 3	Thursday 19 Jan 2023 10:30 am to 12:00 pm	SGD- Diagnosis & Treatment Planning	Prof. Dr. Nasir Saleem / Dr. Khadija Akhtar
Week 4	Tuesday 31 Jan 2023 10:30 am to 12:00 pm	SGD- Prescription writing	Dr. Rubab Shirazi / Dr. Khadija Akhtar
	Wednesday 01 Feb 2023 10:30 am to 12:00 pm	SGD- Irrigants & Intra canal Medicaments	Col Dr. Imran Khan / Dr. Mahnoor
	Thursday 02 Feb 2023 10:30 am to 12:00 pm	SGD- Restoration of Endodontically Treated Teeth	Col Dr. Imran Khan / Dr. Sannan
Week 5	Wednesday 08 Feb 2023 10:30 am to 12:00 pm	SGD- Additional Aesthetic procedures bleaching / macro and micro abrasion	Dr. Sobia Masood / Dr. Mahnoor
Week 6	Completion of Quota		
Week 7	Completion of Quota		
Week 8	Clinical Exam		

Operative Dentistry Department
Final Year BDS (2023)
Small Group Discussion (Group C)

27 Feb 2023		Orientation Day	
27 Feb 23 to 07 May 23	Day/ Date/ Time	Topics	Instructor
Week 2	Sports Week (06 Mar 23 to 12 Mar 23)		
Week 3	Spring Holidays (13 Mar 23 to 19 Mar 23)		
Week 4	Pakistan Day (23 Mar 23)		
Week 5	Thursday 30 Mar 2023 10:30 am to 12:00 pm	SGD- Caries Risk Assessment & Formulation of Treatment Plan	Prof. Dr. Nasir Saleem / Dr. Sannan
Week 6	Tuesday 04 Apr 2023 10:30 am to 12:00 pm	SGD- Diagnosis & Treatment Planning	Prof. Dr. Nasir Saleem / Dr. Khadija Akhtar
	Wednesday 05 Apr 2023 10:30 am to 12:00 pm	SGD- Prescription writing	Dr. Rubab Shirazi / Dr. Khadija Akhtar
	Thursday 06 Apr 2023 10:30 am to 12:00 pm	SGD- Irrigants & Intra canal Medicaments	Col Dr. Imran Khan / Dr. Mahnoor
Week 7	Wednesday 12 Apr 2023 10:30 am to 12:00 pm	SGD- Restoration of Endodontically Treated Teeth	Col Dr. Imran Khan / Dr. Sannan
	Thursday 13 Apr 2023 10:30 am to 12:00 pm	SGD- Additional Aesthetic procedures bleaching / macro and micro abrasion	Col Dr. Imran Khan / Dr. Sannan
Week 8	Completion of Quota		
Week 9	Completion of Quota		
Week 10	Clinical Exam		

Operative Dentistry Department
Final Year BDS (2023)
Small Group Discussion (Group B)

15 May 2023		Orientation Day	
15 May 23 to 16 Jul 23	Day/ Date/ Time	Topics	Instructor
Week 2	Thursday 25 May 2023 10:30 am to 12:00 pm	SGD- Caries Risk Assessment & Formulation of Treatment Plan	Prof. Dr. Nasir Saleem / Dr. Sannan
Week 3	Thursday 01 Jun 2023 10:30 am to 12:00 pm	SGD- Diagnosis & Treatment Planning	Prof. Dr. Nasir Saleem / Dr. Khadija Akhtar
Week 4	Tuesday 06 Jun 2023 10:30 am to 12:00 pm	SGD- Prescription writing	Dr. Rubab Shirazi / Dr. Khadija Akhtar
	Wednesday 07 Jun 2023 10:30 am to 12:00 pm	SGD- Irrigants & Intra canal Medicaments	Col Dr. Imran Khan / Dr. Mahnoor
	Thursday 08 Jun 2023 10:30 am to 12:00 pm	SGD- Restoration of Endodontically Treated Teeth	Col Dr. Imran Khan / Dr. Sannan
Week 5	Wednesday 14 Jun 2023 10:30 am to 12:00 pm	SGD- Additional Aesthetic procedures bleaching / macro and micro abrasion	Dr. Sobia Masood / Dr. Mahnoor
Week 6	Completion of Quota		
Week 7	Eid ul Adha		
Week 8	Completion of Quota		
Week 9	Clinical Exam		

Operative Dentistry Department
Final Year BDS (2023)
Small Group Discussion (Group A)

17 July 2023		Orientation Day	
17 July 23 to 17 Sep 23	Day/ Date/ Time	Topics	Instructor
Week 2	27 July 2023 (Ashura Leave)		
Week 3	Thursday 03 Aug 2023 10:30 am to 12:00 pm	SGD- Caries Risk Assessment & Formulation of Treatment Plan	Prof. Dr. Nasir Saleem / Dr. Sannan
Week 4	Thursday 10 Aug 2023 10:30 am to 12:00 pm	SGD- Diagnosis & Treatment Planning	Prof. Dr. Nasir Saleem / Dr. Malika
Week 5	Tuesday 15 Aug 2023 10:30 am to 12:00 pm	SGD- Prescription writing	Dr. Rubab Shirazi / Dr. Malika
	Wednesday 16 Aug 2023 10:30 am to 12:00 pm	SGD- Irrigants & Intra canal Medicaments	Col Dr. Imran Khan / Dr. Mahnoor
	Thursday 17 Aug 2023 10:30 am to 12:00 pm	SGD- Restoration of Endodontically Treated Teeth	Col Dr. Imran Khan / Dr. Sannan
Week 6	Wednesday 23 Aug 2023 10:30 am to 12:00 pm	SGD- Additional Aesthetic procedures bleaching / macro and micro abrasion	Dr. Sobia Masood / Dr. Mahnoor
Week 7	Completion of Quota		
Week 8			
Week 9	Clinical Exam		

Operative Dentistry

Days: Monday

Time: 10:30 AM to 11:30 AM

Setting: Phantom Head Lab/ Clinical Hall

Week 1	Orientation	
Week 2	Demonstration- Endodontics- Access Cavity Endodontics- Canal Preparation	Dr. Um-e-Rubab Shirazi
Week 3	Demonstration- Endodontics- Obturation	Dr. Um-e-Rubab Shirazi
Week 4	Demonstration- Onlay Preparation	Prof. Dr. Nasir Saleem
Week 5	Demonstration- Direct Veneers Indirect Veneers	Prof. Dr. Nasir Saleem
Week 6	Demonstration- Splinting	Dr. Sobia Masood Tirmazi
Week 7	Clinical Test	

Operative Dentistry Department
Final Year BDS (2023)
Clinical Demonstration

Demonstration Topics:

1. Non-Surgical Endodontic Therapy
2. Restoration of Endodontically Treated Teeth
3. Posterior Composite Buildup
4. Onlay Preparation
5. Veneer Preparation

Operative Dentistry Department
Final Year BDS (2023)
Clinical Demonstration (Group D)

02 Jan 2023		Orientation Day	
02 Jan 23 to 26 Feb 23	Day/Date/Time	Topics	Instructor
Week 1	Tuesday 03 Jan 2023 10:30am to 11:30am	Demonstration – Non Surgical Endodontic Therapy (Access Opening)	Dr. Rubab Shirazi
	Wednesday 04 Jan 2023 10:30am to 11:30am	Demonstration – Non Surgical Endodontic Therapy (Canal Preparation)	Dr. Rubab Shirazi
	Thursday 05 Jan 2023 10:30am to 11:30am	Demonstration - Non Surgical Endodontic Therapy (Obturation)	Dr. Rubab Shirazi
Week 2	Tuesday 10 Jan 2023 10:30am to 11:30am	Demonstration - Restoration of Endodontically Treated Teeth	Col Dr. Imran Khan
	Wednesday 11 Jan 2023 10:30am to 11:30am	Demonstration – Posterior Composite Buildup	Prof. Dr. Nasir Saleem
Week 3	Tuesday 17 Jan 2023 10:30am to 11:30am	Demonstration - Onlay Preparation	Prof. Dr. Nasir Saleem
	Wednesday 18 Jan 2023 10:30am to 11:30am	Demonstration - Veneer Preparation	Prof. Dr. Nasir Saleem

Operative Dentistry Department
Final Year BDS (2023)
Clinical Demonstration (Group C)

27 Feb 2023		Orientation Day	
27 Feb 23 to 07 May 23	Day/Date/Time	Topics	Instructor
Week 1	Tuesday 28 Feb 2023 10:30am to 11:30am	Demonstration – Non Surgical Endodontic Therapy (Access Opening)	Dr. Rubab Shirazi
	Wednesday 01 Mar 2023 10:30am to 11:30am	Demonstration – Non Surgical Endodontic Therapy (Canal Preparation)	Dr. Rubab Shirazi
	Thursday 02 Mar 2023 10:30am to 11:30am	Demonstration - Non Surgical Endodontic Therapy (Obturation)	Dr. Rubab Shirazi
Week 2	Sports Week (06 Mar 23 to 12 Mar 23)		
Week 3	Spring Holidays (13 Mar 23 to 19 Mar 23)		
Week 4	Tuesday 21 Mar 2023 10:30am to 11:30am	Demonstration- Restoration of Endodontically Treated Teeth	Col Dr. Imran Khan
	Wednesday 22 Mar 2023 10:30am to 11:30am	Demonstration – Posterior Composite Buildup	Prof. Dr. Nasir Saleem
Week 5	Tuesday 28 Mar 2023 10:30am to 11:30am	Demonstration - Onlay Preparation	Prof. Dr. Nasir Saleem
	Wednesday 29 Mar 2023 10:30am to 11:30am	Demonstration- Veneer Preparation	Prof. Dr. Nasir Saleem

Operative Dentistry Department
Final Year BDS (2023)
Clinical Demonstration (Group B)

15 May 2023		Orientation Day	
15 May 23 to 16 Jul 23	Day/Date/Time	Topics	Instructor
Week 1	Wednesday 23 May 2023 10:30am to 11:30am	Demonstration – Non Surgical Endodontic Therapy (Access Opening+ Canal Prep)	Dr. Rubab Shirazi
	Thursday 24 May 2023 10:30am to 11:30am	Demonstration – Non Surgical Endodontic Therapy (Obturation)	Dr. Rubab Shirazi
Week 2	Tuesday 30 May 2023 10:30am to 11:30am	Demonstration- Restoration of Endodontically Treated Teeth	Col Dr. Imran Khan
	Wednesday 31 May 2023 10:30am to 11:30am	Demonstration – Posterior Composite Buildup	Prof. Dr. Nasir Saleem
Week 3	Tuesday 06 Jun 2023 10:30am to 11:30am	Demonstration - Onlay Preparation	Prof. Dr. Nasir Saleem
	Wednesday 07 Jun 2023 10:30am to 11:30am	Demonstration- Veneer Preparation	Prof. Dr. Nasir Saleem

Operative Dentistry Department
Final Year BDS (2023)
Clinical Demonstration (Group A)

17 July 2023		Orientation Day	
17 July 23 to 17 Sep 23	Day/Date/Time	Topics	Instructor
Week 1	Tuesday 18 July 2023 10:30am to 11:30am	Demonstration – Non Surgical Endodontic Therapy (Access Opening)	Dr. Rubab Shirazi
	Wednesday 19 July 2023 10:30am to 11:30am	Demonstration – Non Surgical Endodontic Therapy (Canal Preparation)	Dr. Rubab Shirazi
	Thursday 20 July 2023 10:30am to 11:30am	Demonstration - Non Surgical Endodontic Therapy (Obturation)	Dr. Rubab Shirazi
Week 2	Tuesday 25 July 2023 10:30am to 11:30am	Demonstration - Restoration of Endodontically Treated Teeth	Col Dr. Imran Khan
	Wednesday 26 July 2023 10:30am to 11:30am	Demonstration – Posterior Composite Buildup	Prof. Dr. Nasir Saleem
Week 3	Tuesday 01 Aug 2023 10:30am to 11:30am	Demonstration - Onlay Preparation	Prof. Dr. Nasir Saleem
	Wednesday 02 Aug 2023 10:30am to 11:30am	Demonstration - Veneer Preparation	Prof. Dr. Nasir Saleem

Sample MCQs and SEQs

Multiple Choice Question (MCQs)

- A multiple-choice question (MCQ) consist of a stem that states the question or problem followed by a set of possible answers that contain an option that is best answer to the question.
- After reading the questions students should select the appropriate option from the given possible answers.
- The correct answer carries one mark and incorrect carries zero. There is no negative marking.

Sample MCQ

A 30 years old patient presents with a large carious lesion in tooth #15. The tooth is non tender to percussion and palpation. Vitality tests yield a negative response. Radiograph reveals radiolucency around root of #15. There is a draining sinus tract in the attached gingiva close to #15. The sinus tract is traced to apex of #15.

Most probable diagnosis in this case is

- a. Acute apical abscess
- b. Asymptomatic irreversible pulpitis

- c. Chronic apical abscess
- d. Reversible pulpitis
- e. Symptomatic irreversible pulpitis

KEY: C

Short essay question (SEQs)

- Short essay questions require students to present written answers that are used to assess basic knowledge and clinical application of key facts and provide students with an opportunity to demonstrate reasoning and explain their understanding of the subject.

Sample SEQ

A 45 years old patient presents with failed Root Canal Treatment in tooth no 11. The tooth has a recently placed porcelain crown with excellent margins. The patient takes 75mg aspirin daily prophylactically. After initial assessment a decision to perform root end resection is made for this tooth.

- a) What additional investigations may be required for this patient?
- b) Which type of flap would you prefer for this patient? Give rationale for your selection.
- c) How much and at what angle would you perform the root end resection? Give rationale for your selection.

KEY:

- a) ADDITIONAL INVESTIGATIONS needed will be the
 - i. INR value
 - ii. Complete Blood Count(CBC)

B) OCHSENBEIN LEUBKE FLAP. OR SEMILUNAR FLAP

RATIONALE FOR OCHSENBEIN LEUBKE FLAP.

- **Maintains integrity of gingival attachment**

This is required in this clinical scenario to maintain the aesthetics of gingiva around the crown with excellent margins.

It also provides

- Ease in incision & reflection
- Enhanced visibility & access
- Ease in repositioning

RATIONALE FOR SEMILUNAR FLAP

- **Maintains integrity of gingival attachment**

This is required in this clinical scenario to maintain the aesthetics of gingiva around the crown with excellent margins.

It also provides

- Small incision and easy reflection
- No intervention at the periodontium
- Easier oral hygiene compared to other types of flaps.

C) ROOT END RESECTION WILL BE DONE PERPENDICULAR TO LONG AXIS OF THE TOOTH.

Rationale

- It will include most of the deltas and ramifications.
- It will help in distributing forces equally.
- Increase of angle leads to an increase in the communication of the dentinal tubules with the apical region, which isn't desirable.
- Extending the root-end cavity preparation beyond the coronal extent of the root surface is simpler if the root-end resection is perpendicular to the long axis of the tooth.

Department of Operative Dentistry

Final Year BDS 2023

Sample Class Activity

A small group based activity has been planned for you and your class has been divided into 7 groups. Each group is required to make a 5 minute presentation and any of the group members can be asked to present it.

GROUP A

A 35 year old male, in good general medical condition, reported to the OPD, with complaint of poor esthetics and increasing sensitivity in teeth. On intraoral examination, teeth #16 to #13 and #23 and #24 showed non-carious cervical lesions along with gingival recession in the upper arch, with a rather asymmetric pattern of severity for any tooth.



- What are the possible contributing factors responsible for this presentation?
- Enlist factors considered that will help the clinician to decide when to restore NCCLs.
- Outline the management for this particular case.

GROUP B

A 30 year old female reported to the Department of Operative and Conservative Dentistry with the complaint of a fractured tooth in the lower left region since the last two days . The patient's medical history was non- significant. On clinical examination, a previously restored (mesio-occluso-distal) , defective #36 was seen.



- a) What type of restoration can be planned in this case? Give the steps of preparation for it.
- b) Briefly describe the bonding protocol for such a case.
- c) How will you manage the subgingival margin if the restoration is extending subgingivally?

GROUP C

An 18 year old student came to the Operative Dentistry department with the complaint of unaesthetic appearance of front teeth. Upon examination the maxillary lateral incisors were under contoured with open incisal embrasures; a diagnosis of peg laterals was made.



- a) What pre-op evaluations would you like to carry out in this case?
- b) Which teeth will be included in veneers design?

GROUP D

A 25 year-old-male patient reported to the OPD with the chief complaint of staining of teeth. His main concern was to remove and/or minimize the noticeable brown/yellow staining of his teeth, wanting the least invasive and most cost-effective treatment to change his smile. Previous medical and dental history was non- significant.



- a) Keeping into consideration the patient's concern , what treatment options can be given in this case?
- b) Outline the steps of procedure most likely to be used in the above case.

GROUP E

A 30 year old female newscaster reported to your clinic with the complaint of unaesthetic appearance of her front teeth, and she is not happy with her smile.

You decided to give this patient indirect veneers but the patient has to go on air for her show and she can't wait for 2 weeks for indirect veneers after her 1st visit for teeth preparation.



- a) How will you manage the patient in this case by temporization?
- b) What are the materials for provisional restoration?

GROUP F

A 40 years old female reported to your clinic with a complaint of grayish discoloration of her front teeth. Upon investigation, she had taken antibiotic minocycline for her acne treatment for a longer duration.



- a) Enlist other intrinsic and extrinsic causes of discolouration
- b) How will you manage the above given case? Discuss in detail.
- c) What features will you incorporate in veneer design?

GROUP G

A 63 year old healthy male presented in the dental office with a dislodged crown of left maxillary canine (# 23). The crown was placed about a year ago. Patient also reported that this was the second dislodgement of the crown. The first time this crown was dislodged, the tooth received a tooth colored post. Patient reported no other associated symptoms. On a close intraoral radiographic inspection, it was found that the tooth was previously restored with a custom metallic post and core retained crown.



- a) What treatment options can be given to this patient?
- b) If the patient opts to retain the tooth, what factors need to be considered?
What protocol needs to be followed in treating such a case?

**SAMPLE
OSCE**



A. Name the type of discoloration shown in the above figure.

B. List the treatment options that can be considered in this case?



A. Identify the problem in wedge/band placement on the mesial side of tooth no 14 in this picture. (mesial side is marked with an arrow)

B. How can we overcome this problem?



- A.** Identify the type of radiograph shown in the above given picture.
- B.** Given that this is a view of left side, identify the extent and type of pathologies associated with distal of tooth no 24 and mesial of tooth no. 26.



A. According to ICDAS Classification what is the score of the tooth # 16.

B. Give the resistance form and secondary retention form features that you will incorporate for amalgam cavity preparation for this tooth.



A. Identify the complication in tooth # 16.

B. What can be done to avoid this complication?



- A.** Identify the condition shown in the picture given above for a 14 years old patient.
- B.** Give the general management protocol according to the medical model in this patient.

