LAHORE MEDICAL & DENTAL COLLEGE

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OPERATIVE DENTISTRY STUDY

GUIDE

1ND 2ND, 3RD & FINAL YEAR BDS

2026

Compiled By: Dr. Anam Fayyaz and Dr. Noor Fatima

LAHORE MEDICAL & DENTAL COLLEGE

COURSE DIRECTOR:

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CONTRIBUTORS:

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I. INTRODUCTION:

Operative Dentistry is one of the branches of dentistry that deals with the art and science of the diagnosis, prevention, treatment, and prognosis of diseases or trauma to teeth.

Restorative dentistry is the study, diagnosis and integrated management of diseases of the teeth and their supporting structures and the rehabilitation of the dentition to functional and aesthetic requirements of the individual.

Endodontics is the branch of dentistry concerning dental pulp and tissues surrounding the roots of a tooth.

Crown and Bridge is the art and science of restoring damaged teeth with cast metal, metal ceramic, all-ceramic or resin restorations and of replacing missing teeth with fixed prosthesis.

SCOPE AND SEQUENCE:

Training in Operative Dentistry starts in 1st year of BDS. Lectures will be held once a week along with rotation of each batch in the Skills lab and students will be taught pre-clinical skills. During the course of 2nd and 3rd year, lectures will be held once in a week along with 8 weeks of rotation in the department where the students will perform amalgam and composite restorations on phantom teeth in the skills lab. Principles of tooth preparation will be taught.

During the 4th year of BDS, three lectures will be delivered weekly. Students will complete approximately 9- 10 weeks of clinical duties in the department and will accomplish their clinical requirements. On Wednesdays the students will have endodontics and crown and bridge sessions in the skills lab and perform their required quota.

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II. STUDY GUIDE OBJECTIVES:

To facilitate students of first, second, third and final year BDS in managing their studies by prompt information and guidance pertaining to the various aspects of Operative Dentistry course

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III- COURSE DURATION, TOS, EXAMINATION RULES AND REGULATIONS

1st year BDS

	COURSE DURATION: 1 Block
LECTURES	Total no. of lectures: 5 40 min * 5 **= 3.3 hours**
PRACTICALS	1 practical per week for 5 weeks 40 mins/week = **3.3 hours**

Total hours= 3.3+ 3.3

= **6.6 hours**

2ND year BDS

According to 2024 =80 hours
According to current time table

	COURSE DURATION: 3 Blocks CURRENTLY BEING FOLLOWED
LECTURES	Total no. of lectures:27 45 min * 27 **= 20.25 hours**
PRACTICALS	1 practical per week for 27 weeks 1 hour 50 mins/week per batch = **49.5 hours**

Total hours= 20.25 + 49.5= **69.75 hours**

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3rd YEAR BDS

According to 2024 =80 hours required

LECTURES

	COURSE DURATION: 6 MONTHS **CURRENTLY BEING FOLLOWED**
	Total no. of lectures:26 **50 min * 26 = 22 hours**

CLINICAL ROTATION

Operative	**Paedodontics**
Monday: 5.5 hrsx 8 Friday: (3.5 hrsx8)	Tuesday:(3.5 hrsx 8)
Total for 8 weeks = 72 hours	Total for 8 weeks = 28 hours

TOTAL: 72+22= 94 hours

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FINAL YEAR BDS

36 weeks per academic year tentatively

- Three lectures per week for 36 weeks
- 2 weeks of remedial classes will be added after the end of the session
- Division of class into four batches for clinical rotation of approx. 9 weeks per batch tentatively
- Four practical classes per week for each batch (4hr 45 mins+3 hr)
- Thursday Lecture is 45 mins
- One and a half hour tutorials/interactive group discussion classes each day during the Clinical rotation

		Credit hours/Lectures
Lectures	**Faculty**	**No.**
Resto	Dr Saima	38
C&B	Dr Moeen	28.5
Endo	Dr Anam	38
		Total 104.5

			Rotation 1	**Rotation 2**	**Rotation 3**	**Rotation 4**	**Credit hours/ Rotation**
Clinical Rotation: Demonstration and clinical work 10:30-12:30pm **Tutorials:** 12:30-3:00pm	**Subject**	**Faculty**	**No. (days)**	**No. (days)**	**No. (days)**	**No. (days)**	
	Resto	Dr Saima & Dr Anam	(MT)19+9(Fri) 90.25+27 4.75+(4.75x2)x9+ (3x9)	D: 19+9 hr :90.25+27	19+9 90.25+27	19+9 90.25+27	117.25
	Endo	Dr Anam	04 (4.75x4)	04	04	04	19
	C&B	Dr Moeen	04 (4.75x4)	04	04	04	19
							Total 155.25

Send up	**3+4.75 = 8**
Grand total Credit hours:	**155.25 + 104.5 + 8 =**

	267.75 hours
Required by PMDC in Final year BDS (PMDC 2024):	**250**

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Table Of Specifications For Operative Dentistry Theory & Practical

BDS Final Professional Examination

Theory and Practical Examination carries 200 marks.

The examination in the subject of Operative Dentistry shall be as follows:-

I. One written paper of 90 marks mcq in Operative Dentistry

II. Oral and Practical examination shall have 90 marks.

III. The continuous internal assessment shall carry 20 marks i.e 10% of the total allocated marks for the subject. The score will be equally distributed to the theory and practical examinations.

Subject	Theory	Practical	Total
Operative Dentistry	MCQ 90 Marks Internal assessment 10 Marks **100**	Oral and Practical 90 Marks Internal assessment 10 Marks **100**	200 Marks

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Table Of Specifications For Operative Dentistry Theory & Practical

First Professional Examination BDS

Subject	MCQs	OSPE	OSVE
Operative	7	1	1

Second Professional Examination BDS

Subject	MCQs	OSPE	OSVE
Operative	7	1	1

Final Professional Examination BDS

Subject	MCQs
Restorative	54
Endodontics	24
Crown & bridge	6
Paedodontics	6

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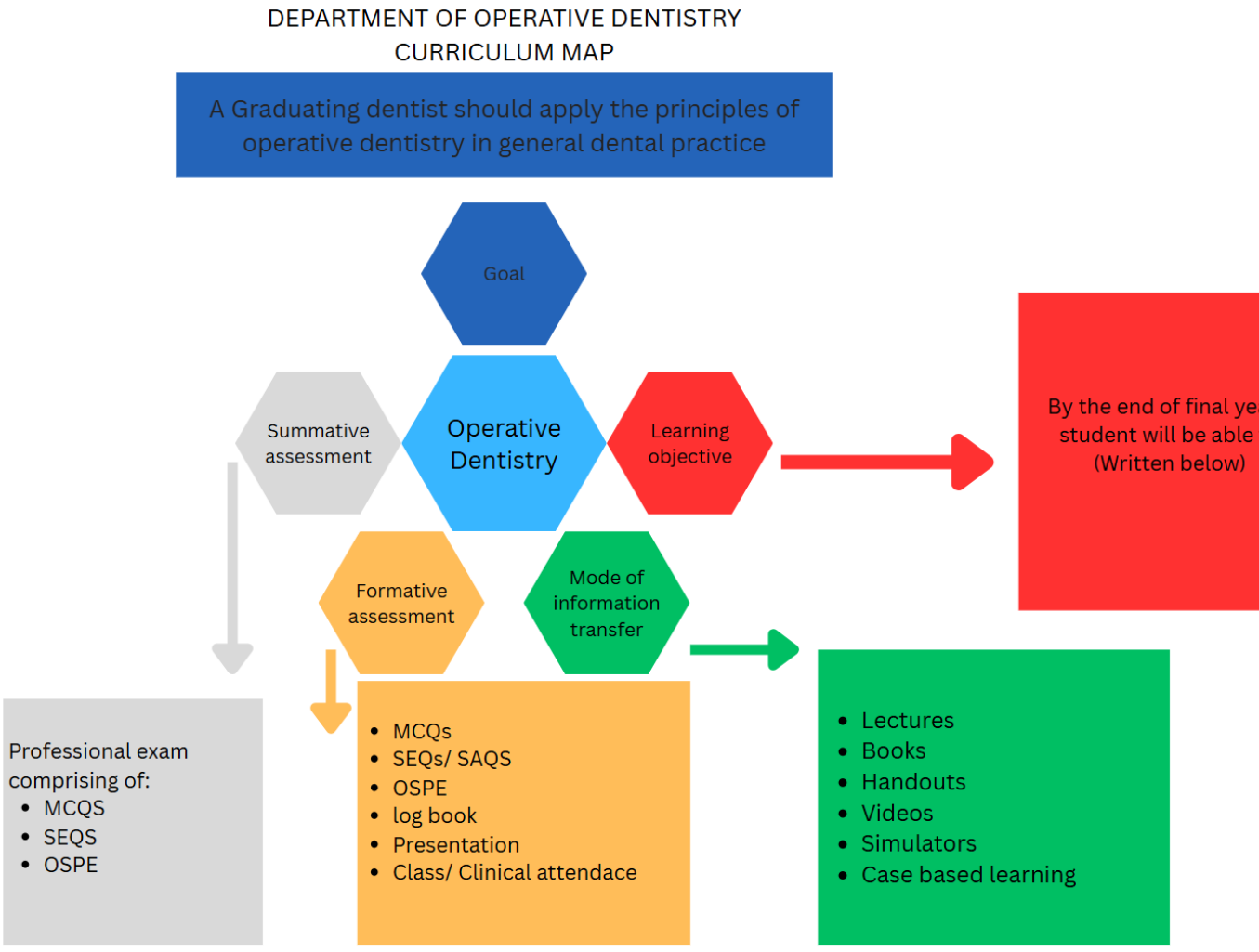
IV. CURRICULUM

Curriculum Map

CURRICULUM OF OPERATIVE DENTISTRY



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LEARNING OBJECTIVES:

The learner should be able to:

1. Assess and formulate a treatment plan
2. Prepare amalgam restorations (class I, II, V)
3. Prepare composite restorations (class I, II, III, IV, V)
4. Usage of GIC as a restorative material
5. Diagnose and assess for repair/ replacement of restorations
6. Diagnose and manage cracks in teeth
7. Diagnose and manage dentine hypersensitivity
8. Assess and prepare aesthetic restorations
9. Prepare restoration of endodontically treated teeth
10. Perform access cavity preparation, determine the working length with a radiographic method, perform cold lateral obturation technique
11. Define and classify types of crown and bridge restorations
12. Assess the suitability of abutment teeth and formulate a treatment plan
13. Prepare different types of crown restorations
14. Evaluate the restorations before insertion
15. Demonstrate insertion of restoration
16. Diagnose and manage developmental defects in primary and permanent teeth
17. Learn to manage trauma to primary and permanent teeth

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BDS UHS THEORY MODULAR CURRICULUM
1ST Jan 2026

1ST YEAR BDS
BLOCK 1, MODULE 3

OPERATIVE DENTISTRY		
CODE	**SPECIFIC LEARNING OUTCOMES**	**TOPIC**
Car1-OD-001	Describe the anatomy of pits and fissures, explain their role in caries susceptibility, and outline preventive strategies such as sealant application and fluoride use.	Pit and Fissure Caries
Car1-OD-002	Describe etiology, risk factors, and clinical features of smooth surface caries; explain role of fluoride in prevention.	Smooth Surface Caries
Car1-OD-003	Describe etiology, clinical features, and progression of root caries.	Root Caries
Car1-OD-004	Differentiate active caries based on clinical features; explain clinical significance; outline management strategies. identify the factors that promote caries arrest.	Active and Arrested Caries
Car1-OD-005	Differentiate arrested caries; describe biological processes and contributing factors.	

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2ND YEAR
BLOCK 4 MODULE 12

OPERATIVE DENTISTRY		
CODE	**SPECIFIC LEARNING OUTCOMES**	**TOPIC**
Oc2-OD-001	Recognize different instruments used in tooth preparation. Describe their functions. Differentiate between hand and rotary instruments.	Instruments and armamentarium
Oc2-OD-002	Explain the importance of isolation in dental procedures, including its role in moisture control, visibility, infection control, and treatment success Enlist components of rubber dam Outline stepwise procedure for application of rubber dam.	Isolation
Oc2-OD-003	Discuss the role of principles of cavity preparation, including outline form, resistance form, retention form, and convenience form in ensuring the longevity and effectiveness of restorative treatments.	Fundamentals of tooth Preparations
Oc2-OD-004	Describe G.V. Black's classification & ICDAS system caries classification of caries and identify various classes of carious lesions using images.	Cavity Classification and Diagnosis

BLOCK 5, MODULE 14

OPERATIVE DENTISTRY		
CODE	**SPECIFIC LEARNING OUTCOMES**	**TOPIC**
Car2-OD-001	Outline the principles and steps of class I amalgam cavity design.	Class I cavity preparation for amalgam
Car2-OD-002	Describe briefly the special physiologic and structural characteristics of the pulp–dentin complex and explain how these influence the pulpal response to injury.	Lining and Pulpal Protection materials
	Explain the advantages, limitations, and appropriate uses of various lining and pulpal protection materials	
	Identify and describe the clinical uses and key considerations associated with different materials used for pulpal protection	
Car2-OD-003	Describe the principles of restoration design for amalgam, including condensation, carving, finishing, and the factors influencing marginal integrity and longevity of the restoration.	Amalgam Restoration in class I

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BLOCK 6, MODULE 17

OPERATIVE DENTISTRY		
CODE	**SPECIFIC LEARNING OUTCOMES**	**TOPIC**
Oc3-OD-001	Describe the principles of Class II cavity preparation, including indications, outline form, resistance and retention features, instrumentation, and the rationale for each step in relation to tooth morphology and caries progression.	Principles and Steps of Class II Cavity Preparation
Oc3-OD-002	Enlist steps of applying liners & bases in a prepared cavity	Application of Liners and Bases in Cavity Preparation
Oc3-OD-003	Enlist the features that indicate an occlusal high spot.	Identification of Occlusal High Spots
Oc3-OD-004	Enlist the complications that may arise due to unadjusted occlusal high spots in restorations.	Complications of Unadjusted Occlusal High Spots in
Oc3-OD-005	Define a matrix system and explain its role in Class II restorations. Enlist the components of a matrix system (matrix band, retainer, wedge). Identify the types of matrix systems used in operative dentistry: • Tofflemire (Universal matrix) • Ivory matrix • Sectional matrix system (introductory level) • Automatrix system	Matrix system
Oc3-OD-006	Explain the functions of wedges in Class II restorations. Discuss the consequences of improper matrix or wedge placement, such as: • Open proximal contacts • Gingival overhangs • Poor contour and marginal leakage	Wedges

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INTRODUCTION TO RESTORATIVE DENTISTRY

3rd and 4th year BDS

Course director: Prof. Dr. Saima Razaq Khan

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Define operative dentistry, along with an overview of dental anatomy, histology, physiology and occlusion.	Dr. Saima , Dr. Anam, Dr. Sabah
2.	Assessment of patients Formulate a diagnosis Assess the prognosis Outline treatment plan for patients.	Dr. Saima, Dr. Anam, Dr. Sabah
3.	Discuss cross infection control, identify different methods of contamination. Illustrate personal barrier protection, aseptic techniques and sterilization. Amalgam waste disposal.	Dr. Saima, Dr. Anam , Dr. Sabah
4.	Illustrate patient and operator position and instrument exchange.	Dr. Saima, Dr. Anam, Dr. Sabah
5.	Discuss isolation techniques. Illustrate rubber dam isolation and other methods.	Dr. Saima, Dr. Anam, Dr. Sabah
6.	Name and explain instruments and equipment for tooth preparation-hand and rotary instruments.	Dr. Saima, Dr. Anam, Dr. Sabah
At the end of this course, the student will be able to:		
1.	Evaluate patients, and formulate treatment plans	
2.	Practice cross infection control	
3.	Practice rubber dam application	

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DENTAL CARIES

Taught in 3rd, 4th year BDS

Course director: Prof. Dr. Saima Razaq Khan

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Identify the etiology of dental caries.	Dr. Saima,Dr. Anam, Dr. Sabah
2.	Classify dental caries.	Dr. Saima,Dr Anam, Dr. Sabah
3.	Identify the clinical characteristics of dental caries.	Dr. Saima,Dr. Anam, Dr. Sabah
4.	Analyze the risk assessment.	Dr. Saima, Dr. Anam, Dr. Sabah
5.	Formulate management protocols.	Dr. Saima,Dr. Anam, Dr. Sabah
At the end of this course, the student will be able to:		
1.	Identification of dental caries	
2.	Plan management protocols	

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AMALGAM RESTORATIONS

Taught in 2nd, 3rd and 4th year BDS

Course director: Prof. Dr. Saima Razaq Khan

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Apply principles of cavity preparation; initial tooth preparation steps-outline form, resistance and retention form, convenience form; amalgam use and manipulation; final tooth preparation steps-removal of remaining carious dentin, pulp protection, liners and bases and its uses, secondary resistance and retention form, finishing of enamel walls and margins and final procedures-cleaning, inspecting and sealing. Finishing and polishing of direct amalgam restorations.	Dr. Saima,Dr. Anam, Dr. Sabah
2.	Outline the steps of Class I amalgam cavity design and principles, liners and bases, and filling technique-condensation and carving.	Dr. Saima,Dr. Anam, Dr. Sabah
3.	Outline the steps of Class II amalgam cavity design and principles, matrix placement & liners and bases, and filling technique- condensation and carving.	Dr. Saima, Dr.Anam, Dr. Sabah
4.	Outline the matrix systems used in direct restorations, matrix application for Class II amalgam, matrix application for Class II, III & IV composite.	Dr.Saima,Dr. Anam, Dr. Sabah
5.	Outline the steps of Class III, V and VI amalgam cavity design and principles, liners and filling technique-condensation and carving.	Dr.Saima,Dr. Anam Dr. Sabah
6.	Identify & enlist the reasons of failure of amalgam restorations Indications/contraindications, replacement options.	Dr. Saima, Dr. Sabah
<u>At the end of this course, the student will be able to:</u>		
1.	Prepare Amalgam Class I restoration	
2.	Prepare Amalgam Class II restoration	
3.	Prepare Amalgam Class III restoration	
4.	Prepare Amalgam Class V restoration	
5.	Prepare Amalgam Class VI restoration	

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COMPOSITE RESTORATIONS

Taught in 2nd, 3rd and 4th year BDS

Course director: Prof. Dr. Saima Razaq Khan

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Describe adhesion to enamel and dentin in direct and indirect restorations; classification of dentinal adhesives, related clinical factors.	Dr. Saima,Dr.Anam, Dr. Aisha ,Dr. Sabah
2.	Review composite resins material science; classify and discuss composites, polymerization properties, general considerations for composite restorations, clinical techniques.	Dr. Saima,Dr.Anam, Dr. Aisha, Dr. Sabah
3.	Rationale of finishing and polishing of composite restorations, the use of burs, disks, interproximal strips and polishing paste.	Dr. Saima,Dr.Anam, Dr. Aisha, Dr. Sabah
4.	Outline the steps of Class I composite restorations, pit and fissure sealants, preventive resins and conservative composite restorations, clinical techniques for class 1 direct composite restoration.	Dr. Saima, Dr.Anam,Dr. Aisha Dr. Sabah
5.	Outline the steps of Class II composite restorations, clinical techniques for class II direct composite restorations, extensive class II direct composite restorations and foundations.	Dr. Saima,Dr.Anam, Dr. Aisha, Dr. Sabah
6.	Outline the steps of Class III, IV and V composite restorations, class III, IV and V direct composite restorations, clinical techniques for class III direct composite restorations, clinical techniques for class IV direct composite restorations, clinical techniques for class V direct composite restorations.	Dr. Saima
7.	Identify & enlist the reasons of failure of composite restorations Indications/contraindications, replacement options.	Dr. Saima
<u>At the end of this course, the student will be able to:</u>		
1.	Prepare Composite Class I restoration	
2.	Prepare Composite Class II restoration	
3.	Prepare Composite Class III restoration	
4.	Prepare Composite Class IV restoration	
5.	Prepare Composite Class V restoration	

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COMPLEX AMALGAM RESTORATIONS & RESTORATION OF ENDODONTICALLY TREATED TEETH

Taught in 4th year BDS

Course director: Prof. Dr. Saima Razaq Khan

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Enlist Indications/contraindications, advantages/disadvantages of complex amalgam restorations	Dr. Saima
2.	Illustrate pin retained amalgam restorations, slot retained, cove, proximal lock, amalgam foundation used in complex amalgam restorations	Dr. Saima
3.	Evaluate the risk analysis and assess and formulate a treatment plan for endodontically treated teeth	Dr. Saima
4.	Discuss material selection and enlist properties of ideal core for restoration of endodontically treated teeth	Dr. Saima
5.	Illustrate post design and materials	Dr. Saima
6.	Describe adhesion within root canal and the clinical principles	Dr. Saima
At the end of this course, the student will be able to:		
1.	Prepare a complex amalgam restoration employing the most suitable method for that preparation	

NON-CARIOUS CERVICAL LESIONS, GIC & DENTINAL HYPERSENSITIVITY

Taught in 3rd, 4th year BDS

Course director: Prof. Dr. Saima Razaq Khan

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Define and discuss non-carious tooth defects-abrasion, erosion, attrition, abfraction & their treatment	Dr. Saima
2.	Review composition, structure and properties of GIC. Identify their clinical use and considerations and modifications of GIC.	Dr.Saima,Dr. Anam, Dr. Aisha, Dr. Sabah
3.	Define dentinal hypersensitivity; identify its etiology and clinical features, management of dentinal hypersensitivity.	Dr. Saima
<u>At the end of this course, the student will be able to:</u>		
1.	Use GIC as a restorative material	
2.	Use GIC for pulp capping	

BLEACHING AND ABRASION

Taught in 4th year BDS

Course director: Prof. Dr. Saima Razaq Khan

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Classify bleaching treatments. Analyze the mechanism of bleaching.	Dr. Saima
2.	Identify and differentiate between non-vital and vital bleaching procedures.	Dr. Saima
3.	Outline the concept of abrasion. Identify and differentiate between micro abrasion and macro abrasion	Dr. Saima

COMPOSITE VENEERS AND INLAYS AND ONLAYS

Taught in 4th year BDS

Course director: Prof. Dr. Saima Razaq Khan, Dr Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Outline the clinical procedure, tooth preparation and fabrication and cementation of composite veneers.	Dr. Saima
2.	Enlist the indications/contraindications of inlays and onlays, advantages/disadvantages, types and clinical procedure. Metal and tooth-coloured inlays	Dr. Saima, Dr. Moeen

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CERAMICS

Taught in 2nd year BDS

Course director: Dr. Aisha Arshad

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Introduction to ceramics, advantages and disadvantages, composition and types, types of crowns, identification of crown and its parts, failure of bonding	Dr. Aisha

INTRODUCTION TO ENDODONTICS

Taught in 3rd, 4th year BDS

Course director: Dr. Anam Fayyaz

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Define endodontics, along with an overview of the root canal system. Explain the objectives, indications and contra-indications of Root Canal Treatment. Summarize the steps for RCT.	Dr. Anam

2.	Discuss the protection of the pulp and preservation of the apex. Define them; explain the iatrogenic effects on dental pulp, and protecting the pulp from the effects of materials.	Dr. Anam
3.	Discuss and outline the introduction of pulp and periapical pathosis, the irritants, inflammatory process, lesion progression. List and discuss the classification of pulpal diseases, classification of periapical diseases, healing of pulp and periapical tissues	Dr. Anam, Dr Aisha
4.	Discuss diagnosis and treatment planning. Outline the diagnostic process, discuss the interpretation of different types of pain; describe the clinical examination, clinical tests, interpretation of radiographic examination, formulation of treatment plan, and systemic considerations.	Dr. Anam

ROOT CANAL PROCEDURE

Taught in 4th year BDS
Course director: Dr. Anam Fayyaz

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Discuss endodontic instruments. Discuss and appraise rubber dam isolation. Name and explain instruments for access cavity preparation, root canal preparation, and for filling root canals	Dr. Anam
2.	Explain pulp space anatomy and access cavities. Identify the components of root canal system; outline the general principles and laws relating to the pulp chamber anatomy. Describe and illustrate the access cavity preparation for anterior teeth, posterior teeth, individual teeth, and discuss and recognize the errors in access.	Dr. Anam
3.	Discuss isolation, goals and methods of isolation. Define and explain working length determination, discuss the methods of working length determination and classification of Apex Locators	Dr. Anam
4.	Define cleaning and shaping of the root canals. Enlist the principles of cleaning, principles of shaping, describe and illustrate apical canal preparation, pretreatment evaluation. Discuss the different root canal preparation techniques and hand instrumentation.	Dr. Anam
5.	Discuss and explain endodontic irrigants, the objectives of irrigation, irrigation hydrodynamics, properties of an ideal irrigants and the types of irrigants used.	Dr. Anam
6.	Explain intra-canal medicaments, benefits of intra-canal medicaments, commonly used intra-canal medicaments, temporary restorations, objectives of temporary restorations and the materials used for temporary restorations.	Dr. Anam
7.	Define and explain obturation, objectives of obturation, materials used for obturation, ideal properties of obturation materials, obturation techniques with gutta-percha and the evaluation of obturation.	Dr. Anam
<u>At the end of this course, the student will be able to:</u>		
1.	Access Cavity Preparation	
2.	Instrument identification	
3.	Radiographic evaluation	
4.	Working Length determination with a radiographic method	

5.	Cold Lateral Obturation Technique	

ENDODONTIC EMERGENCIES AND FLARE-UPS, PROCEDURAL ACCIDENTS, NON-SURGICAL RE-TREATMENTS

Taught in 4th year BDS

Course director: Dr. Anam Fayyaz

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Diagnosis and treatment planning of endodontic emergencies and flare-ups, incidence of exacerbations. Enlist the categories of emergencies, interappointment emergencies and the management of flare-ups.	Dr. Anam
2.	Discuss procedural accidents, explain and describe perforations during access preparation, accidents during cleaning and shaping and accidents during obturation.	Dr. Anam
3.	Indications and contra-indications for non-surgical retreatment, risks and benefits of re-treatment, endodontic retreatment procedures, and discuss the prognosis.	Dr. Anam

ENDODONTIC SURGERY, ENDODONTIC AND PERIODONTAL INTERRELATIONSHIP

Taught in 4th year BDS

Course director: Dr. Anam Fayyaz

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Discuss endodontic surgery, incision for drainage, periapical surgery, corrective surgery, root amputation, hemisection and bicuspidization.	Dr. Anam
2.	Explain the endodontic and periodontal interrelationship, the pathways of communication between the dental pulp and the periodontium, effects of pulpal diseases and endodontic procedures on periodontium, effect of periodontal disease and procedure on pulp and the classification and differential diagnosis of endodontic-periodontic lesions.	Dr. Anam

The role of endodontics after dental trauma

Taught in 4th year BDS

Course director: Dr. Anam Fayyaz

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Describe the clinical and radiographic features of enamel fractures, uncomplicated crown fractures, complicated crow fractures, crown-root fractures, root fractures, concussion, subluxation, luxations (lateral, extrusive, and intrusive), avulsions,and alveolar fractures.	Dr. Anam
2.	Most common types of Dental Trauma.	Dr. Anam
3.	Traumatic emergencies: Crown fractures - Root fractures - Displacement - Avulsion Diagnose different dental traumatic injuries and to enlist different steps or guidelines for managing such injuries	Dr. Anam
4.	Vital pulp therapy.	Dr. Anam
5.	Treatment method.	Dr. Anam
6.	Follow-up after Dental trauma	Dr. Anam
7.	Sequelae of Dental traumatic injuries	Dr. Anam
8.	Follow-up after dental trauma	Dr. Anam

INTRODUCTION TO CROWN AND BRIDGE, INDICATIONS OF CROWNS

Taught in 4th year BDS

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Introduction to crown and bridge Define -Full veneer crown -partial veneer crown -post and core crown -Porcelain jacket crown/ All ceramic crown -Porcelain fused to metal crown/ Metal ceramic crown -Metal crown	Dr. Moeen ud Din

Course director: Dr. Moeen ud Din

GENERAL PRINCIPLES OF CROWN PREPARATION

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator

1.	Apply basic principles of crown preparation -Conservation of tooth structure - Retention and resistance form - Marginal integrity - Structural durability -Conservation of periodontium.	Dr. Moeen ud Din

CASE ASSESSMENT FOR CROWN AND BRIDGE

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Asses and formulate a treatment plan for Crown and Bridge - Assessment of general factors - Evaluation of abutment - Treatment planning.	Dr. Moeen ud Din

TYPES OF CROWNS

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Enlist indications & contraindication of crowns -Classify crowns -Identify advantages & disadvantages of different types	Dr. Moeen ud Din

PORCELAIN JACKET CROWN

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	-Enlist indications/ Contraindications of Porcelain Jacket Crown -Outline the steps of preparation for Porcelain Jacket Crown	Dr. Moeen ud Din
At the end of this course, the student will be able to:		
1.	Prepare Porcelain Jacket crown	

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PORCELAIN FUSED TO METAL CROWNTaught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Enlist Indications/ Contraindications of Porcelain fused to metal Crown Outline the steps of Preparation of Porcelain fused to metal Crown	Dr. Moeen ud Din
At the end of this course, the student will be able to:		
1.	Prepare Porcelain fused to metal crown	

POST AND CORE CROWNS

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Enlist Indications/ contraindication of Post and core crown Outline the steps of Preparation for post and core crowns Select technique for making Post and core crown	Dr. Moeen ud Din
At the end of this course, the student will be able to:		
1.	Prepare post and core crown	

CAST METAL CROWN

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Enlist Indications/ Contraindications of metal Crown Outline the steps of Preparation of metal crown	Dr. Moeen ud Din
At the end of this course, the student will be able to:		

1.	Prepare Full veneer metal crown	

PARTIAL VENEER CROWNS

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Enlist Indications/ Contraindications of Partial veneer Crown Outline the steps of Preparation of partial veneer Crown	Dr. Moeen ud Din

TISSUE MANAGEMENT AND IMPRESSION TAKING

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Manage Soft tissues before impression taking Select impression technique for crown and bridge work	Dr. Moeen ud Din
At the end of this course, the student will be able to:		
1.	Prepare Impression techniques	

OCCLUSAL RECORD, TRYING IN, TEMPORARY CROWNS AND CEMENTATION

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator

1.	Register Occlusion of the patient Temporize the prepared teeth - objectives - types -techniques for chair side temporary crown	Dr. Moeen ud Din
2.	Try-in Crown and Bridge restoration - logical sequence of try-in, Select cementation technique for crowns	Dr. Moeen ud Din
<u>At the end of this course, the student will be able to:</u>		
1.	Prepare Try-in and cementation of crown	

BRIDGE RESTORATIONS

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Define bridge restorations Enlist Indications & Contraindications Classify bridge restoration Analyze Advantages and disadvantages of different types bridges	Dr. Moeen ud Din

ABUTMENT SELECTION

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Evaluate and select abutments for a bridge Select a suitable bridge design	Dr. Moeen ud Din

PONTIC SELECTION

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Define Pontic Apply Principles of pontic design Enlist Indications, advantages and disadvantages of different types of pontics Select suitable type of pontic	Dr. Moeen ud Din

RETAINERS AND CONNECTOR SELECTION

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Define Retainers Enlist types of retainers Select retainer for a bridge- factors affecting the selection of a retainer	Dr. Moeen ud Din
2.	Define connector Enlist types of connectors Select type of connector for bridge	Dr. Moeen ud Din

RESIN BONDED BRIDGES

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Define resin bonded bridges Enlist Indications and contraindications Select Type of resin bonded bridges Compare advantages/ disadvantages of different types	Dr. Moeen ud Din

MAINTENANCE, FAILURE & REPAIR OF BRIDGES

Taught in 4th year BDS

Course director: Dr. Moeen ud Din

Sr. No.	Learning Outcomes (LO)	Facilitator
1.	Differentiate the success & failure of Crown & Bridge Identify the cause of failure Formulate/design its solution	Dr. Moeen ud Din

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V.ACADEMIC CALENDARS

I. 1st Year BDS

II. 2nd Year BDS

III. 3rd Year BDS

IV. Final Year BDS

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FIRST YEAR BDS

LECTURES & TEST SCHEDULE

COURSE DIRECTOR: PROF. DR. SAIMA RAZZAQ KHAN

Sr. NO	DAY/DATE	DISCUSSION TOPIC	FACILITATOR	READING MATERIALS
1	26th march 2026	Describe the anatomy of pits and fissures, explain their role in caries susceptibility, and outline preventive strategies such as sealant application and fluoride use.	DR.ANAM	ART AND SCIENCE chapter 2
2	2nd april	Describe etiology, risk factors, and clinical features of smooth surface caries; explain role of fluoride in prevention.	DR.ANAM	ART AND SCIENCE chapter 2
3	2nd april	Describe etiology, clinical features, and progression of root caries.	DR.ANAM	ART AND SCIENCE chapter 2
4	9th april	Differentiate active caries based on clinical features; explain clinical significance; outline management strategies. identify the factors that promote caries arrest.	DR.ANAM	ART AND SCIENCE chapter 2

5	16th april	Differentiate arrested caries; describe biological processes and contributing factors.	DR.Aisha	ART AND SCIENCE chapter 2
6	23th april	Differentiate arrested caries; describe biological processes and contributing factors.	DR.Aisha	ART AND SCIENCE chapter 2

S. NO	DAY/DATE	HANDS ON EXERCISES/SMALL GROUP DISCUSSIONS DR.AISHA	FACILITATOR
1	2nd april	Identify fluoride gel and demonstrate application procedure.	Dr.aisha
2	9th april	Identify pits, fissures, smooth surface, and root caries on models, or images	Dr.aisha
3	16th april	Differentiate active versus arrested caries on prepared slides or images	Dr.aisha
4	23th april	Identify pits, fissures, smooth surface, and root caries on models, or images	Dr.aisha

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DEPARTMENT OF OPERATIVE DENTISTRY
LAHORE MEDICAL AND DENTAL COLLEGE

OPERATIVE DENTISTRY 2nd YEAR BDS 2026

BLOCK 4 MODULE 11 CARIOLOGY II

DATE	DAY*	SPECIFIC LEARNING OUTCOMES	TEACHER
12-5-26	TUESDAY	Discuss the etiology of dental caries.	DR.AISHA
		Classify dental caries based on site, severity, and activity.	
		Describe the dynamic process of demineralization and remineralization in the development of caries.	
		Discuss the clinical characteristics of dental caries.	
19-5-26	TUESDAY	Explain the radiographic appearance of dental caries.	DR.AISHA
		Discuss prevention of caries using medical model.	
		Outline minimally invasive and operative approaches to caries management.	
02-6-26	TUESDAY	Explain the criteria used to classify adult and pediatric patients into high, moderate, or low caries risk based on clinical findings, caries history, and relevant risk factors.	DR.AISHA
		Describe principles of caries risk assessment and their role in clinical decision-making.	

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MODULE 13 DENTAL MATERIALS AND PRE CLINICAL DENTISTRY

DATE	DAY	SPECIFIC LEARNING OUTCOMES	Teacher
9-6-26	TUESDAY	Recognize different instruments used in tooth preparation. Describe their functions Differentiate between hand and rotary instruments. Discuss the hazards of rotary instruments	DR.AISHA
16-6-26	TUESDAY	Explain the importance of isolation in dental procedures, including its role in moisture control, visibility, infection control, and treatment success Enlist components of rubber dam Outline stepwise procedure for application of rubber dam.	DR.AISHA
23-6-26	TUESDAY	Discuss the principles of cavity preparation, including outline form, resistance form, retention form, and convenience form in ensuring the longevity and effectiveness of restorative treatments.	DR.AISHA
30-6-26	TUESDAY	Discuss the principles of cavity preparation, including outline form, resistance form, retention form, and convenience form in ensuring the longevity and effectiveness of restorative treatments.	DR.AISHA
		6^{th} July to 2^{nd} august summer vacations	
4-8-26	TUESDAY	Discuss the principles of cavity preparation, including outline form, resistance form, retention form, and convenience form in ensuring the longevity and effectiveness of restorative treatments.	DR.AISHA
11-8-26	TUESDAY	Revision class(block 4)	DR.AISHA
18-8-26	TUESDAY	Revision class(block 4)	DR.AISHA

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BLOCK 5

MODULE 18 DENTAL MATERIALS AND PRECLINICAL DENTISTRY II

Block 5 start date;31st August 2026
Block 5 start date;27thNovember 2026

30-6-26	TUESDAY	Outline the principles and steps of tooth preparation for class I amalgam cavity design on mandibular molars, maxillary molars and premolars utilizing principles of cavity preparations.
		Understand the objectives of pulp protection and clinical considerations
		Describe the principles of restoration design for amalgam, including condensation, carving, finishing, and the factors influencing marginal integrity and longevity of the restoration
		Describe the indications and case selection for Class I composite restorations
		Explain conservative cavity design principles for posterior adhesive restorations.
		Explain polymerization shrinkage and C-factor in posterior composites
		Discuss finishing, polishing, and occlusal adjustment protocols to optimize restoration longevity.
		Describe common clinical complications (e.g., postoperative sensitivity, marginal leakage, open contacts, overhangs) and discuss preventive strategies.

BLOCK 6

MODULE 21 DENTAL MATERIALS AND PRECLINICAL DENTISTRY III

Block 6 start date; 7th december2026
Block 6 start date; 26th feburary 2026

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CODE	SPECIFIC LEARNING OUTCOMES	TOPIC	RECOMMENDED BOOK	STUDY HOURS
DMPD3-OD-001	Describe the principles of Class II cavity preparation, including indications,outline form, resistance and retention features, Principles and Steps of Class 2 instrumentation, and the rationale for each step in relation to tooth morphology and caries progression.	Principles and Steps of ClassII Cavity Preparation	**ART AND SCIENCE OF OPERATIVEDENTISTRY(SECOND SOUTH ASIA EDITION)Chap13**	2
DMPD3-OD-002	Enlist steps of applying liners & bases in a prepared class II cavity.	Application of Liners and Bases in Cavity Preparation	**ART AND SCIENCE OF OPERATIVEDENTISTRY(SECOND SOUTH ASIA EDITION)Chap6,chap 11p.277** **ART AND SCIENCE OF OPERATIVEDENTISTRY(SECOND SOUTH ASIA EDITION)Chap11 page no.270,chap 13 page no.315,316**	1
DMPD3-OD-03	Enlist the features that indicate an occlusal high spot.	Identification of Occlusal High Spots		1
DMPD3-OD-004	Enlist the complications that may arise due to unadjusted occlusal high spots in restorations.	Complications of Unadjusted Occlusal High Spots in Restorations	**ART AND SCIENCE OF OPERATIVEDENTISTRY(SECOND SOUTH ASIA EDITION)Chap13**	
DMPD3-OD-005	Define a matrix system and explain its role in Class II restorations. Matrix system Enlist the components of a matrix system (matrix band, retainer, wedge). Identify the types of matrix systems used in operative dentistry: • Tofflemire (Universal matrix) • Ivory matrix • Sectional matrix system (introductory level) • Automatrix system	Matrix system	**ART AND SCIENCE OF OPERATIVEDENTISTRY(SECOND SOUTH ASIA EDITION)Chap13**	1 1
DMPD3-OD-006	Explain the functions of wedges in Class II restorations. Wedges Discuss the consequences of improper matrix or wedge placement, such as: • Open proximal contacts • Gingival overhangs • Poor contour and marginal leakage	Wedges	**ART AND SCIENCE OF OPERATIVEDENTISTRY(SECOND SOUTH ASIA EDITION)Chap13** **ART AND SCIENCE OF OPERATIVEDENTISTRY(SECOND SOUTH ASIA EDITION)chap19**	
DMPD3-OD-007	Describe the principles of class I compound cavity preparation for amalgam, indications, outline form, resistance and retention features.	Class I compound Restoration with Amalgam		
DMPD3-OD-008	Describe the indications and case selection for Class II composite restorations. Class II Composite	Class II Composite Restorations		3

	Restorations Explain conservative cavity design principles for posterior adhesive restorations. Describe principles of proximal box preparation and gingival margin management for class II cavity.			

Professor Dr. Saima Razzaq Khan
HOD
Department of Operative Dentistry
Lahore Medical and Dental College

LAHORE MEDICAL & DENTAL COLLEGE

DEPARTMENT OF OPERATIVE DENTISTRY
LAHORE MEDICAL AND DENTAL COLLEGE

OPERATIVE DENTISTRY 3RD YEAR BDS 2026
SCHEDULE (Lectures&Practical)

Session start date (4-5-26 to 7-2-27)
Monday/Friday practical will be taken by DR SABAH/PG TRAINEES
Tuesday to Paedo.

Sr. #	Date	Day	Time	Topic	Faculty
	4th may	Monday	9:55 to 3:00pm	INTRODUCTION TO OPERATIVE DENTISTRY Instruments (hand & rotary instruments)	DR ASEEF/PG TRAINEE
	5th may	Tuesday			PAEDO
1	**7th may**	**THURSDAY**	**8:00 to 8:50am**	**INTRODUCTION TO OPERATIVE DENTISTRY**	**DR.SABAH KAIANI**
	8	Friday	9:40 to 1:00pm	Fundamentals Of Tooth Preparation(Tooth Morphology)	DR ASEEF/PG TRAINEE
	11	Monday	9:55 to 3:00pm	CLASS I AMALGAM (CAVITY DESIGN), Instruments (Hand And Rotary)	DR ASEEF/PG TRAINEE
	12	Tuesday			PAEDO
2	**14th may**	**THURSDAY**	**8:00 to 8:50am**	**DENTAL CARIES(Etiology, Clinical Characteristics)**	**DR.SABAH KAIANI**
	15	Friday	9:40 to 1:00pm	CLASS I AMALGAM (CAVITY DESIGN AND PRINCIPLES) History Taking,Ergonomics	DR ASEEF/PG TRAINEE
	18	Monday	9:55 to 3:00pm	GIC MIXING(LINERS AND BASES)+BOOK READING	DR ASEEF/PG TRAINEE
	19	Tuesday			PAEDO
3	**21st may**	**THURSDAY**	**8:00 to 8:50am**	**DENTAL CARIES(Risk Assessment And Management)**	**DR.SABAH KAIANI**
	25	Monday	9:55 to 3:00pm		

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	26	Tuesday			
4	**28th may**	**Thursday**	**8:00 to 8:50am**	**EID HOLIDAYS**	
	29	Friday	9:40 to 1:00pm		
	1st june	Monday	9:55 to 3:00pm	FINISHING AND POLISHING (CLASS 1 AMALGAM)	DR ASEEF/PG TRAINEE
	2	Tuesday			PAEDO
5	**4th june**	**THURSDAY**	**8:00 to 8:50am**	**PATIENT ASSESMENT, EXAMINATION(Treatment Planning)**	**DR.SABAH KAIANI**
	5	Friday	9:40 to 1:00pm	MONTHLY TEST	DR.SABAH KAIANI
	8	Monday	9:55 to 3:00pm	CLASS II AMALGAM DESIGN and principles	DR.SABAH KAIANI
	9	Tuesday			PAEDO
6	**11th June**	**THURSDAY**	**8:00 to 8:50am**	**Infection Control**	**DR.SABAH KAIANI**
	12	Friday	9:40 to 1:00pm	TOFFLEMIRE PLACEMENT, CONDENSATION, PRECARVE BURNISHING, CARVING	DR.SABAH KAIANI
	15	Monday	9:55 to 3:00pm	CLASS II AMALGAM RESTORATION(CONDENSATION, CARVING)	DR.SABAH KAIANI
	16	Tuesday			PAEDO
7	**18th June**	**Thursday**	**8:00 to 8:50am**	**Infection Control**	**DR.SABAH KAIANI**
	19	Friday	9:40 to 1:00pm	Class III &IV COMPOSITE RESTORATION	DR.SABAH KAIANI
	22	Monday	9:55 to 3:00pm	Class III &IV COMPOSITE RESTORATION	DR.SABAH KAIANI
	23	Tuesday			PAEDO
8	**25th June**	**Thursday**	**8:00 to 8:50am**	**MUHARRAM HOLIDAYS**	
	26	Friday	9:40 to 1:00pm		
	29	Monday	9:55 to 3:00pm	NEW BATCH FUNDAMENTALS OF TOOTH PREPARATION	DR.SABAH KAIANI
	30	Tuesday			PAEDO
9	**2nd July**	**Thursday**	**8:00 to 8:50am**	**Instrument and equipment(LECTURE)**	**DR.SABAH KAIANI**

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	3	Friday	9:40 to 1:00pm	FUNDAMENTALS OF TOOTH PREPARATION	DR SABAH KAIANI
	6	Monday	9:55 to 3:00pm	CLASS I AMALGAM RESTORATION	DR ROHA/PG TRAINEE
	7	Tuesday			PAEDO
10	**9th July**	**Thursday**	**8:00 to 8:50am**	**Fundamentals of Tooth Preparation(LECTURE)**	**DR.SAIRA WAHEED**
	10	Friday	9:40 to 1:00pm	CLASS I AMALGAM RESTORATION	DR ROHA/PG TRAINEE
	13	Monday	9:55 to 3:00pm	GIC MIXING(LINERS AND BASES)+BOOK READING	DR ROHA/PG TRAINEE
	14	Tuesday			PAEDO
			16TH JULY TILL 2nd AUGUST SUMMER VACATIONS		
	3rd August	Monday	9:55 to 3pm	RUBBERDAM PLACEMENT AND ISOLATION TECHNIQUES	DR KISRA/PG TRAINEE
	4	Tuesday			PAEDO
12	6th August	**Thursday**	**8:00 to 8:50am**	**Introduction To Silver Amalgam (LECTURE)**	**DR.SABAH KAIANI**
	7	Friday	9:40 to 1:00pm	CLASS II AMALGAM DESIGN and principles	DR KISRA/PG TRAINEE
	10	Monday	9:55 to 3pm	CLASS II AMALGAM DESIGN and principles	DR KISRA/PG TRAINEE
	11	Tuesday			PAEDO
13	13th August	**Thursday**	**8:00 to 8:50am**	**Introduction To Silver Amalgam (LECTURE)**	**DR.SABAH KAIANI**
			14th AUGUST		
	17	Monday		TOFFLEMIRE PLACEMENT, CONDENSATION, PRECARVE BURNISHING, CARVING	DR KISRA/PG TRAINEE
14	20th august	**Thursday**	**8:00 to 8:50am**	**Class, I AMALGAM RESTORATION**	**DR.SABAH KAIANI**
	21	Friday	9:40 to 1:00pm	CLASS II AMALGAM RESTORATION (CONDENSATION, CARVING)	DR KISRA/PG TRAINEE
	24	Monday	9:55 to 3:00pm	Class III &IV COMPOSITE RESTORATION	DR KISRA/PG TRAINEE
	25	Tuesday	11:30 to 3:00pm		PAEDO
15	**27**	**Thursday**	**8:00 to 8:50am**	**Class, I AMALGAM RESTORATION**	**DR.SABAH KAIANI**
	28	Friday	9:40 to 1:00pm	MONTHLY TEST	DR KISRA/PG TRAINEE
	31	Monday	9:55 to 3:00pm	Class III &IV COMPOSITE RESTORATION	
	1st September	Tuesday	11:30 to 3:00pm		PAEDO
16	3rd	**Thursday**	**8:00 to 8:50am**	**Class II AMALGAM RESTORATION**	**DR.SABAH KAIANI**
	4th	Friday	9:40 to 1:00pm	NEW BATCH	DR.SABAH

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				FUNDAMENTALS OF TOOTH PREPARATION(TOOTH MORPHOLOGY)	
	7th	Monday	9:55 to 3:00pm	CLASS I AMALGAM (CAVITY DESIGN), Instruments (Hand And Rotary)	DR.SABAH
	8th	Tuesday	11:30 to 3:00pm		PAEDO
17	**9th September**	**Thursday**	**8:00 to 8:50am**	**Class II AMALGAM RESTORATION**	**DR.SABAH KAIANI**
	11th	Friday	9:40 to 1:00pm	CLASS 1 AMALGAM DESIGN AND PRINCIPLES(CAVITY PREP)	DR.SABAH
	14th	Monday	9:55 to 3:00pm	CLASS I AMALGAM CONDENSATION ,PRECARVE BURNISHING ,CARVING	DR.SABAH
	15th	Tuesday	11:30 to 3:00pm		PAEDO
18	**17th September**	**Thursday**	**8:00 to 8:50am**	**Class V AMALGAM RESTORATION**	**DR.SABAH KAIANI**
	18th	Friday	9:40 to 1:00pm	RUBBER DAM APPLICATION	DR. SABAH
	21st	Monday	9:55 to 3:00pm	CLASS II AMALGAM DESIGN and principles	DR. SABAH
	22nd	Tuesday	11:30 to 3:00pm		PAEDO
19	**24th September**	**Thursday**	**8:00 to 8:50am**	**Class V AMALGAM RESTORATION**	**DR.SABAH KAIANI**
	25	Friday	9:40 to 1:00pm	MATRICES (Different Types)TOFFLEMIRE PLACEMENT	DR SABAH
	28	Monday	9:55 to 3:00pm	CLASS II AMALGAM RESTORATION(condensation,burnishing)	DR SABAH
	29	Tuesday	11:30 to 3:00pm		PAEDO
22	**1st October**	**Thursday**	**8:00 to 8:50am**	**INTRODUCTION TO ENDODONTICS (Periapical pathosis)**	**DR.SABAH KAIANI**
	2	Friday	9:40 to 1:00pm	CLASS II AMALGAM RESTORATION(FINISHING AND POLISHING)	DR SABAH
	5	Monday	9:55to 3:00pm	Class III &IV COMPOSITE RESTORATION	DR SABAH
	6	Tuesday			PAEDO
23	**8th October**	**Thursday**	**8:00 to 8:50am**	**INTRODUCTION TO ENDODONTICS**	**DR.SABAH KAIANI**
	9	Friday	9:40 to 1:00pm	Class III &IV COMPOSITE RESTORATION	DR SABAH
	12	Monday	9:55 to 3:00pm	FINISHING AND POLISHING	DR SABAH
	13	Tuesday			PAEDO
24	**15th oct**	**Thursday**	**8:00 to 8:50am**	**INTRODUCTION TO CROWN AND BRIDGE**	**DR.SABAH KAIANI**
	16	Friday	9:40 to 1:00pm	GIC MIXING(LINERS AND BASES)+BOOK READING	DR SABAH

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	19	Monday	9:55 to 3:00pm	INFECTION CONTROL	DR SABAH
	20	Tuesday			PAEDO
25	**22nd oct**	**Thursday**	**8:00 to 8:50am**	**INTRODUCTION TO INDIRECT RESTORATIONS**	**DR.SABAH KAIANI**
	23	Friday	9:40 to 1:00pm	MONTHLY TEST(MCQ)	DR SABAH
	26	Monday	9:55 to 3:00pm	MONTHLY TEST(PRACTICAL)	DR SABAH
	27	Tuesday			PAEDO
26	**29th oct**	**Thursday**	**8:00 to 8:50am**	**INTRODUCTION TO INDIRECT RESTORATIONS**	**DR.SABAH KAIANI**
	30	Friday	9:40 to 1:00pm	Book Reading(Revision)	DR SABAH
	2nd nov	Monday	9:55 to 3:00pm	NEW BATCH FUNDAMENTALS OF TOOTH PREPARATION(TOOTH MORPHOLOGY)	DR SABAH
	3	Tuesday			PAEDO
27	**5th nov**	**Thursday**	**8:00 to 8:50am**	**DENTAL CARIES**	**DR.SABAH KAIANI**
	6	Friday	9:40 to 1:00pm	CLASS I AMALGAM +INSTRUMENTS	DR SABAH
	9	Monday	9:55 to 3:00pm	CLASS 1 AMALGAM DESIGN AND PRINCIPLES	DR SABAH
	10	Tuesday			PAEDO
28	**12th nov**	**Thursday**	**8:00 to 8:50am**	**DENTAL CARIES**	**DR.SABAH KAIANI**
	13	Friday	9:40 to 1:00pm	CLASS I AMALGAM RESTORATION	DR SABAH
	16	Monday	9:55to 3:00pm	RUBBER DAM APPLICATION	DR SABAH
	17	Tuesday			PAEDO
29	**19th NOV**	**Thursday**	**8:00 to 8:50am**	**CLASS III COMPOSITE**	**DR.SABAH KAIANI**
	20	Friday	9:40 to 1:00pm	CLASS II AMALGAM	DR SABAH
	23	Monday	9:55 to 3:00pm	MATRICES (DIFFERENT TYPES)	DR SABAH
	24	Tuesday			PAEDO
30	**26 NOV**	**Thursday**	**8:00 to 8:50am**	**CLASS III COMPOSITE**	**DR.SABAH KAIANI**
	27	Friday	9:40 to 1:00pm	CLASS II AMALGAM	DR SABAH
	30	Monday	9:55 to 3:00pm	CLASS III COMPOSITE	DR SABAH
	1st dec	Tuesday			PAEDO
31	**3rd DEC**	**Thursday**	**8:00 to 8:50am**	**CLASS 1V COMPOSITE**	**DR.SABAH KAIANI**
	4	Friday	9:40 to 1:00pm	CLASS 1V COMPOSITE	DR SABAH
	7	Monday	9:55 TO 3pm	GIC MIXING	DR SABAH

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	8	Tuesday			PAEDO
32	**10th DEC**	**Thursday**	**8:00 to 8:50am**	**CLASS 1V COMPOSITE**	**DR.SABAH KAIANI**
	11	Friday	9:40 to 1:00pm	MONTHLY TEST	DR SABAH
	14	Monday	9:55 to 3:00pm	BOOK READING	DR SABAH
	15	Tuesday			PAEDO
33	**17th DEC**	**Thursday**	**8:00 to 8:50am**	**FUNDAMENTALS OF TOOTH PREPARATION**	**DR.SABAH KAIANI**
	18	Friday	9:40 to 1:00pm		DR SABAH
	21	Monday	9:55 to 3:00pm	NEW BATCH FUNDAMENTALS OF TOOTH PREPARATION(TOOTH MORPHOLOGY)	DR SABAH
	22	Tuesday			PAEDO
34	**24th DEC**	**Thursday**	**8:00 to 8:50am**	**FUNDAMENTALS OF TOOTH PREPARATION**	**DR.SABAH KAIANI**
	25	Friday	9:40 to 1:00pm	CLASS I AMALGAM +INSTRUMENTS	DR SABAH
	28	Monday	9:55 to 3:00pm	CLASS 1 AMALGAM DESIGN AND PRINCIPLES	DR SABAH
	29	Tuesday			PAEDO
35	**31st DEC**	**Thursday**	**8:00 to 8:50am**	**REVISION CLASS**	**DR.SABAH KAIANI**
	1st jan	Friday	9:40 to 1:00pm	CLASS I AMALGAM RESTORATION	DR SABAH
	4	Monday	9:55 to 3:00pm	RUBBER DAM APPLICATION	DR SABAH
	5	Tuesday			PAEDO
36	**7thJAN**	**Thursday**	**8:00 to 8:50am**	**REVISION CLASS**	**DR.SABAH KAIANI**
	8	Friday	9:40 to 1:00pm	CLASS II AMALGAM	DR SABAH
	11	Monday	9:55 to 3:00pm	CLASS II AMALGAM	DR SABAH
	12	Tuesday			PAEDO
37	**14th JAN**	**Thursday**	**8:00 to 8:50am**	**REVISION CLASS**	**DR.SABAH KAIANI**
	15	Friday	9:40 to 1:00pm	MATRICES (DIFFERENT TYPES)	DR SABAH
	18	Monday	9:55 to 3:00pm	CLASS III COMPOSITE	DR SABAH
	19	Tuesday			PAEDO
38	**21st JAN**	**Thursday**	**8:00 to 8:50am**	**REVISION CLASS**	**DR.SABAH KAIANI**
	22	Friday	9:40 to 1:00pm	CLASS IV COMPOSITE	DR SABAH
	25	Monday	9:55 to 3:00pm	CLASS III and IV COMPOSITE (FINISHING)	DR SABAH
	26	Tuesday			PAEDO
39	**28th JAN**	**Thursday**	**8:00 to 8:50am**	**REVISION CLASS**	**DR.SABAH KAIANI**
	29	Friday	9:40 to 1:00pm	GIC MIXING	DR SABAH
	1st Feb	Monday	9:55 to 3:00pm	MONTHLY TEST	DR SABAH
	2	Tuesday			PAEDO

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40	**4th FEB**	**Thursday**	**8:00 to 8:50am**	**REVISION CLASS**	**DR.SABAH KAIANI**
	5	Friday	9:40 to 1:00pm	BOOK READING	DR SABAH

Dr. Saima Razzaq Khan
Professor/HOD

LAHORE MEDICAL & DENTAL COLLEGE

FINAL YEAR BDS

LECTURES & TEST SCHEDULE

Sr No.	Date	Day	Topic	Faculty
1.	11-5-26	Mon	Introduction to Crown and bridge	Dr. Moeen
2.	13-5-26	Wed	Introduction to endodontics	Dr. Anam
3.	14-5-26	Thurs	Introduction to Operative dentistry	Dr. Saima
4.	18-5-26	Mon	General principles of crown preparation	Dr. Moeen
5.	20-5-26	Wed	Pathogenesis of Pulp and Periapical diseases	Dr. Anam
6.	21-5-26	Thurs	Pathogenesis of Pulp and Periapical diseases	Dr. Anam
7.	**25-5-26-31-5-26**	**Wed- Sun**	**Eid-ul-Azha Holidays**	
8.	1-6-26	Mon	General principles of crown preparation	Dr. Moeen
9.	3-6-26	Wed	Endodontic Diagnosis and Treatment Planning	Dr. Anam
10.	4-6-26	Thurs	Principles of Cavity Preparation	Dr. Saima
11.	8-6-26	Mon	Endodontic Diagnosis and Treatment Planning	Dr. Anam
12.	10-6-26	Wed	Types of crowns, Porcelain Jacket crown	Dr. Moeen
13.	11-6-26	Thurs	Principles of Cavity Preparation/ Clinical technique of amalgam	Dr. Saima
14.	15-6-26	Mon	Endodontic Instruments	Dr. Anam
15.	17-6-26	Wed	Porcelain fused to metal crown Porcelain fused to metal crown	Dr. Moeen
16.	18-6-26	Thurs	Clinical technique of amalgam /Fundamentals of Adhesion	Dr. Saima
17.	22-6-26	Mon	**Class Test 1**	Dr. Saima
18.	24-6-26	Wed	Pulp space antomy	Dr. Anam
19.	25-6-26	Thurs	Clinical technique of composite	Dr. Saima
20.	29-6-26	Mon	All metal crown	Dr. Moeen
21.	1-7-26	Wed	Pulp space Anatomy	Dr. Anam
22.	2-7-26	Thurs	Class 1 amalgam and composite	Dr. Saima
23.	6-7-26	Mon	Cleaning and Shaping	Dr. Anam
24.	8-7-26	Wed	Cleaning and Shaping	Dr. Anam
25.	9-7-26	Thurs	Endodontic Irrigants	Dr. Anam
26.	13-7-26	Mon	Intracanal medicaments	Dr.Anam
27.	15-7-26	Wed	Procedural errors	Dr. Anam
28.	**6-7-2026 to 2-8-2026**	**Thurs- Sun**	**Summer Holidays**	

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29.	3-8-26	Mon	Partial Veneer Crown	Dr.Moeen
30.	5-8-26	Wed	Fundamentals of adhesion	Dr.Saima
31.	6-8-26	Thurs	Fundamentals of adhesion	Dr. Saima
32.	10-8-26	Mon	Class 2 amalgam and composite	Dr.Saima
33.	12-8-26	Wed	Post and Core Crown	Dr. Moeen
34.	13-8-26	Thurs	Anterior composite restorations	Dr. Saima
35.	17-8-26	Mon	Post and core crown	Dr. Moeen
36.	19-8-26	Wed	Dental caries	Dr. Saima
37.	20-8-26	Thurs	Dental caries	Dr. Saima
38.	**24-8-26**	**Mon**	**Class Test 2**	**Dr. Saima**
39.	26-8-26	Wed	Impression material and techniques	Dr. Moeen
40.	27-8-26	Thurs	NCCL Restoration	Dr. Saima
41.	31-8-26	Mon	Procedural errors	Dr. Anam
42.	2-9-26	Wed	Soft tissue management and impression taking	Dr. Moeen
43.	3-9-26	Thurs	Macroabrasion and microabrasion	Dr. Saima
	7-9-26	Mon	Obturation	Dr. Anam
44.	9-9-26	Wed	Bite registration and temporization	Dr.Moeen
45.	10-9-26	Thurs	Macro vs Micro Abrasion Resin Infiltration	Dr. Saima
46.	14-9-26	Mon	Obturation	Dr. Anam
47.	16-9-26	Wed	Try-in and cementation	Dr. Moeen
48.	17-9-26	Thurs	Non-Vital Tooth bleaching	Dr. Saima
49.	**21-9-26**	**Mon**	**Grand Test**	**Dr. Anam**
50.	23-9-26	Wed	Endodontic Emergencies and Flare ups	Dr. Anam
51.	24-9-26	Thurs	Vital Bleaching	Dr. Saima
52.	28-9-26	Mon	Indications and types of bridges	Dr. Moeen
53.	30-9-26	Wed	Endodontic Emergencies and Flare ups	Dr. Anam
54.	1-10-26	Thurs	Non-Vital Tooth bleaching	Dr. Saima
55.	5-10-26	Mon	Abutment evaluation and selection	Dr. Moeen
56.	7-10-26	Wed	Endodontic Surgery/ Non-surgical Retreatment	Dr. Anam
57.	8-10-26	Thurs	Direct Composite Veneers	Dr. Saima
58.	12-10-26	Mon	Pontic selection and design Retainer selection	Dr. Moeen
59.	14-10-26	Wed	Endodontic Surgery	Dr. Anam
60.	15-10-26	Thurs	Complex Amalgam Restorations	Dr. Saima
61.	19-10-26	Mon	Retainer selection	Dr. Moeen
62.	21-10-26	Wed	Endo-perio lesions	Dr. Anam
63.	22-10-26	Thurs	Revision	Dr. Saima
64.	**26-10-26**	**Mon**	**Class test 3**	**Dr. Moeen**
65.	28-10-26	Wed	Resorptions	Dr. Anam
66.	29-10-26	Thurs	Revision	Dr. Saima

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67.	2-11-26	Mon	Tooth fractures	Dr. Anam
68.	4-11-26	Wed	Connector selection	Dr. Moeen
69.	5-11-26	Thurs	Revision	Dr. Saima
70.	9-11-26	Mon	Dental Trauma	Dr. Anam
71.	11-11-26	Wed	Resin bonded bridges	Dr. Moeen
72.	12-11-26	Thurs	Revision	Dr. Saima
73.	16-11-26	Mon	Revision	Dr. Anam
74.	18-11-26	Wed	Tooth colored Inlays and Onlays	Dr. Moeen
75.	19-11-26	Thurs	Revision	Dr. Saima
76.	**23-11-26**	**Mon**	**Class test 4**	**Dr. Saima**
77.	25-11-26	Wed	Revision	Dr. Moeen
78.	26-11-26	Thurs	Revision	Dr. Saima
79.	30-11-26	Mon	Revision	Dr. Moeen
80.	2-12-26	Wed	Revision	Dr. Anam
81.	3-12-26	Thurs	Revision	Dr. Saima
82.	7-12-26	Mon	Revision	Dr. Moeen
83.	9-12-26	Wed	Revision class	Dr. Anam
84.	10-12-26	Thurs	Revision class	Dr. Saima
85.	14-12-26	Mon	Revision	Dr. Moeen
86.	16-12-26	Wed	Revision	Dr. Anam
87.	17-12-26	Thurs	Revision	Dr. Saima
88.	**21-12-26**	**Mon**	**Class Test 5**	**Dr. Moeen**
89.	23-12-26	Wed	Revision	Dr. Anam
90.	24-12-26	Thurs	Revision	Dr. Saima
91.		**Thurs**	**Quaid Day/ Christmas Holiday**	
92.		**Sat-Sun**	**Winter Break**	
93.	4-1-27	Mon	Revision class	Dr. Anam
94.	6-1-27	Wed	Revision class	Dr.Moeen
95.	7-1-27	Thurs	Revision class	Dr.Saima
96.	11-1-27	Mon	Revision class	Dr. Anam
97.	13-1-27	Wed	Revision class	Dr.Moeen
98.	14-1-27	Thurs	Quiz	Dr. Saima
99.	18-1-27	Mon	Revision class	Dr. Anam
100	20-1-27	Wed	Revision class	DR. Moeen
101	21-1-27	Thurs	Quiz	Dr. Saima
102	**25-1-27**	**Mon**	**Class Test 6**	**Dr. Anam**
103	27-1-27	Wed	Revision class	Dr. Moeen
104	28-1-27	Thurs	Quiz	Dr. Saima

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VI. CLINICAL LEARNING OBJECTIVES

LAHORE MEDICAL & DENTAL COLLEGE

BDS UHS PRACTICAL CURRICULUM
1ST Jan 2026

1ST YEAR BDS
BLOCK 1, MODULE 3

OPERATIVE DENTISTRY		
CODE	**SPECIFIC LEARNING OUTCOMES**	**TOPIC**
Car1-OD-006	Identify fluoride gel and demonstrate application procedure.	Prevention of Dental Caries
	Identify pits, fissures, smooth surface, and root caries on models, or images	
	Differentiate active versus arrested caries on prepared slides or images	

2ND YEAR BDS
BLOCK 4 MODULE 12

OPERATIVE DENTISTRY		
CODE	**SPECIFIC LEARNING OUTCOMES**	**TOPIC**
Oc2-OD-005	Identify the instruments and equipment for tooth preparation and filling.	Instruments and Equipment for Tooth Preparation and Restoration
Oc2-OD-006	Perform rubber dam application for isolation on typodont	Rubber Dam Application and Isolation Techniques
Oc2-OD-007	Perform patient and operator position and instrument exchange.	Clinical Ergonomics: Operator and Patient Positioning with Instrument Exchange

LAHORE MEDICAL & DENTAL COLLEGE

BLOCK 5, MODULE 14

OPERATIVE DENTISTRY		
CODE	**SPECIFIC LEARNING OUTCOMES**	**TOPIC**
Car2-OD-004	Perform rubber dam application for isolation on typodont	Isolation

Car2-OD-005	Prepare a G.V. Black's Class I cavity on typodont for an amalgam restoration (premolars & molars).	Class I Cavity Preparation
Car2-OD-006	Apply liners & bases in a prepared cavity	Pulp protection
Car2-OD-007	Restore a prepared Class I cavity on a typodont with dental amalgam, following proper techniques of trituration, condensation, carving, and finishing.	Class I Restoration with amalgam

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BLOCK 6, MODULE 17

OPERATIVE DENTISTRY		
CODE	**SPECIFIC LEARNING OUTCOMES**	**TOPIC**
Oc3-OD-007	Prepare a G.V. Black's Class II cavity on typodont for an amalgam restoration maintaining isolation.	Class II Cavity Preparation for Amalgam Restoration
Oc3-OD-008	Place a matrix band correctly and stabilize it using a wedge to achieve proper gingival adaptation.	Matrix Band Placement
Oc3-OD-009	Demonstrate correct wedge insertion technique (direction, size, and position) on a typodont/phantom head model.	Wedge insertion technique
Oc3-OD-010	Apply liners & bases in a prepared cavity	Application of Liners and Bases
Oc3-OD-011	Restore a prepared Class II cavity on a typodont with dental amalgam, following proper techniques of trituration, condensation, carving, and finishing.	Amalgam Restoration Techniques: Trituration, Condensation, Carving, and Finishing
Oc3-OD-012	Assess the completed restoration for gingival overhangs, marginal adaptation, and proximal contact after removal of the matrix and wedge.	Assessment of completed restoration

LAHORE MEDICAL & DENTAL COLLEGE

FINAL YEAR BDS

CLINICAL DEMONSTRATIONS

Sr no.	Day	TOPIC/ LEARNING OBJECTIVES	Faculty
1	01	**History taking and treatment planning**	Dr Anam
		1. History taking and informed consent	
		2. Clinical examination	
		3. Radiographic interpretation	
		4. Diagnosis and treatment planning for dental carious lesions	
2		**Cross infection Protocol**	Dr Moeen
		1. Hand Hygiene / Hand washing technique	
		2. Putting on and Removing PPE, Masks, Protective Eyewear, Face shields, Protective clothing, Gowns, Gloves	
		3. Transport of instruments to the processing area	
		4. Cleaning/ Washing of instruments	
		5. Packaging of instruments	
		6. Sterilization monitoring (Verification of sterility using physical, chemical, and biological indicators)	
		7. Sterilization of dental handpieces, burs, and other restorative materials	
		8. Needle stick injury prevention and immediate management	
		9. Disinfection of dental units	
3	01	**Instruments and Materials**	Dr Anam
		1. Identification of hand instruments (cutting, non-cutting)	
		2. Identification of powered/rotary cutting equipment	
		3. Hazards with cutting instruments and their prevention	
		4. Identification and manipulation of dental materials (Amalgam, Composite, GIC, Calcium hydroxide, Etchant, Bonding agent)	
		5. Amalgam waste disposal	
4		**Rubber Dam Application**	Dr Moeen
		1. Patient counselling for rubber dam application	
		2. Anterior segment isolation	
		3. Premolar isolation	
		4. Fractured tooth isolation	

		5. Molar isolation	
		6. Single tooth isolation	
		7. Rubber Dam application	
5	01	**Matrix systems**	Dr Anam
		Placement of tofflemire retainer according to clinical situation	
		Placement of palodent retainer according to clinical situation	
		Placement of mylar strip matrix for Anterior Composite Restoration; identification of other matrix systems available	
6		**Pulp Protection**	Dr Anam
		Vital pulp therapy procedures	
		Application of liner/ base before restoration (according to clinical situation)	
7	01	**Class I Cavity Preparation for Amalgam and Composite**	Dr Moeen
8	01	**Class II Cavity Preparation for Amalgam and Composite**	Dr Anam
9		**Class III and IV Cavity Preparation**	Dr Anam

LAHORE MEDICAL & DENTAL COLLEGE

Endodontic Clinical Schedule

Teacher: Dr Anam Fayyaz

Sr	Days	Topic	Teacher
1.	Day 1	**Identification of Endodontic Instruments** 1. Burs (Round diamond bur, tapered diamond bur, Endo Z bur) 2. Reamers 3. Files (K&H) 4. Barbed broaches 5. DG16 Explorer 6. Endodontic Explorer 7. Pluggers 8. Spreaders 9. Lentulo Spiral 10. Electric pulp tester 11. Apex locator 12. Rotary files 13. Endo Motor 14. Obtura **Radiographic Interpretation** Internal & External resorption Apical Periodontitis Pulp stones Dental Trauma/VRF	Dr. Anam
2.	Day 2	**Access opening** Pulp space Anatomy Prepare access cavity Determination of working length **Cleaning and Shaping of the root canal**	
3.	Day 3	**Root Canal Obturation** **Patient Counselling & Management** Fractured File	

		Ledge Formation Perforations Over & Under obturated canal Instrument aspiration/Ingestion Vertical root fracture Extraction of tooth undergoing Root canal treatment	
4.	Day 4	**Clinical test and viva**	

Crown and Bridge
Clinical Training

Teacher : Dr Moeen ud Din

Day 1. General Principles of crown preparation
Demonstration of Porcelain Jacket crown
Preparation on Phantom teeth

Day 2 Demonstration of Porcelain fused to metal crown
Preparation on Phantom teeth
Temporization
Lab. Procedure for metal ceramic crown
Try in of crown, occlusal adjustment
Cementation of crowns
History taking, clinical examination and radiographic Assessment
Tissue management and impression taking

Day 3 Demonstration of Cast Metal crown
Preparation on Phantom teeth
Demonstration of Post and core build up
Post and core build up on Phantom teeth

Day 4 Crown Preparation on Phantom teeth- test
Clinical test and viva
Crown Preparation on Patients
Impression taking and temporization
Identification of types of Bridges
Identification of component of a bridge

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RESTORATIVE CLINICAL LEARNING OBJECTIVES (FINAL YEAR)

Sr #	LEARNING OBJECTIVES	PERFORMED	NOT PERFORMED	DAYS	MODE OF ASSESSMENT		EVALUATION	EVALUATE		CAN PERFORM CONFIDENTLY	CANNOT PERFORM CONFIDENTLY
	History taking and treatment planning				**Clinical test**	**Viva**	**Test result & student feedback**	**Faculty**	**Teaching Assistant**		
1.	History taking and informed consent										
2.	Clinical examination										
3.	Radiographic										

	interpr etation										
4.	Diagnosis and treatment planning for dental carious lesions										
	Cross infection Protocol										
5.	Hand Hygiene / Hand washing Technique										
6.	Putting on and Removing PPE (Personal Protective Equipment) Masks, Protective Eyewear, Face shields, Protective clothing, Gowns, Gloves										
7.	Transport of instruments to the processing area										
8.	Cleaning/ Washing of instruments										
9.	Packaging of Instruments										
10.	Sterilization Monitoring (Verification of										

	sterility using physical, chemical, and Biological indicators)										
11.	Sterilization of dental handpieces, burs, and other Restorative Materials										
12.	Needle stick injury prevention and Immediate Management										
13.	Disinfection of dental units										
	Instruments and Materials										
14.	Identification of hand instruments (cutting, non-cutting)										
15.	Identification of powered/rotary cutting equipment										
16.	Hazards with cutting instruments										

	and their Prevention										
17.	Identification and manipulation of dental materials (Amalgam, Composite, GIC,										
	Calcium hydroxide, Etchant, Bonding agent)										
18.	Amalgam waste disposal										
	Rubber Dam Application										
19.	Patient counselling for rubber dam Application			**01**							
20.	Anterior segment isolation										
21.	Premolar isolation										
22.	Fractured tooth isolation										
23.	Molar isolation										
24.	Single tooth Isolation										
25.	Rubber Dam application										
	Matrix System										
26.	Placement of tofflemire retainer according to clinical situation+										

LAHORE MEDICAL & DENTAL COLLEGE

27.	Placement of palodent retainer according to clinical situation			**01**							
28.	Placement of mylar strip matrix for Anterior Composite Restoration; identification of other matrix systems available										
	Pulp Protection										
29.	Vital therapy procedures										
30.	Application of liner/ base before restoration (according to clinical situation)			**01**							
	Amalgam Restorations										
31.	Conservative Class I Cavity Preparation for Amalgam Restoration			**08**							
32.	Extensive Class I Amalgam Restoration										
33.	Class Il Cavity Preparation for Amalgam Restoration										

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34.	Class V Cavity Preparation for Amalgam Restoration										
	Composite Restorations										
35.	Bonding protocol before Composite Restoration (Etch & Rinse, Self-Etch)			**09**							
36.	Cavity preparation and restoration for Class I Composite										
37.	Cavity preparation and restoration for Class Il Composite										
38.	Cavity preparation and restoration for Class III Composite										

39.	Cavity preparation and restoration for Class IV Composite										
40.	Cavity preparation and restoration for Class V Composite										

LAHORE MEDICAL & DENTAL COLLEGE

ENDODONTIC CLINICAL LEARNING OBJECTIVES (FINAL YEAR)

Sr #	LEARNING OBJECTIVES	PERFORMED	NOT PERFORMED	DAYS	MODE OF ASSESSMENT		EVALUATION	EVALUATE		CAN PERFORM CONFIDENTLY	CANNOT PERFORM CONFIDENTLY
	Identification of Endodontic Instruments				**Clinical test**	**Viva**	**Test result & student feedback**	**Faculty**	**Teaching assistant**		
1.	Burs (Round diamond bur, tapered diamond bur, Endo Z bur)			**2**							
2.	Reamers										
3.	Files (K&H)										
4.	Barbed broaches										
5.	DG16 Explorer										
6.	Endodontic Explorer										
7.	Pluggers										
8.	Spreaders										
9.	Lentulospiral										
10.	Electric pulp tester										
11.	Apex locator										
12.	Rotary files										

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13.	Endomotor										
14.	Obtura										
	Radiographic Interpretation										
15.	Internal & External resorption										
16.	Apical Periodontitis										
17.	Pulp stone										
18.	Dental Trauma/VRF										
	Steps of root canal preparation										
19.	Pulp space Anatomy										
20.	Prepare access Cavity			**1**							
21.	Determination of working length										
22.	Cleaning and Shaping of the root Canal			**2**							
23.	Root canal obturation			**2**							

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	Patient Counselling & Management										
24.	Fractured File										
25.	Ledge Formation										
26.	Perforations										
27.	Over & Under obturated canal										
28.	Instrument aspiration/ Ingestion			**2**							
29.	Vertical root fracture										
30.	Extraction of tooth undergoing Root canal treatment										
31.	**Clinical Test and Viva**			**1**							

LAHORE MEDICAL & DENTAL COLLEGE

CROWN & BRIDGE CLINICAL LEARNING OBJECTIVES (FINAL YEAR)

Sr #	LEARNING OBJECTIVES	PERFORMED	NOT PERFORMED	DAYS	MODE OF ASSESSMENT		EVALUATION	EVALUATE		CAN PERFORM CONFIDENTLY	CANNOT PERFORM CONFIDENTLY
	History taking and treatment planning				**Clinical test**	**Viva**	**Test result & student feedback**	**Faculty**	**Teaching assistant**		
1.	History taking and informed Consent			**2**							
2.	Clinical examination										
3.	Radiographic interpretation										
4.	Assess and formulate a treatment plan for Crown/Bridge										
5.	Evaluation and selection of abutments for a Bridge										
6.	Communication with the patient according to the clinical										

	scenarios										
	Clinical procedures for Crown										
7.	Shade matching										
8.	Putty index for crown preparation			**3**							
9.	Identification of crown cutting burs										
10.	Porcelain jacket crown preparation										
11.	Porcelain fused to metal crown preparation										
12.	Cast metal crown preparation										
13.	Tissue management and impression Making										
	Restoration of endodontically treated tooth										
14.	Identification and selection of post			**1**							
15.	Preparation for post										

16.	Cementation of post										
	Lab procedures for metal ceramic crown										
17.	Wax up			**1**							
18.	Investment										
19.	Casting										
20.	Porcelain layering and baking										
	Steps in placement of Crown										
21.	Temporization										
22.	Identification of temporary crown/bridge			**1**							
23.	Try-in and cementation of Crown										
	Bridges										
24.	Identification of components of a bridge			**1**							
25.	Identification of resin bonded bridge										
26.	Selection of bridge design										
27.	**Clinical Test and Viva**			**1**							

LAHORE MEDICAL & DENTAL COLLEGE

CLINICAL DUTIES AND REQUIREMENTS

- Each student will spend a total of 09 weeks approximately in final year in the Department of Operative dentistry
- Each student will be required to:

Third Year BDS Restorative

Clinical Exercises

Sr No.	Pre-clinical performance	No of Practices
1	Amalgam class I (mandibular molars)	02
2	Amalgam class I (maxillary molars)	02
3	Amalgam class II (mandibular molars)	02
4	Amalgam class II maxillary molar	02
5	Composite restoration (Maxillary Anterior)	01
6	Composite restoration (Mandibular Molar)	01
7	GIC mixing	01
8	Rubber Dam Application	01

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Final Year BDS

S. No	Clinical Quota	No. of Practices
1	**Restorations**	• 15 Amalgam • 15 Composite
2	**Crown & Bridge**	• 1 Porcelain Jacket Crown Preparation, • Impression taking, chair side temporary crowns • 1 Porcelain fused to metal crown preparations • 1 metal crown preparation • Trail and cementation of crowns
3	**Endodontics** Instrument identification exercise	• Endodontic Access instruments • Root canal preparation Instruments • Root canal Obturation Instruments
	Endodontic exercise – Endoblock	• Access cavity • Working length determination • RC preparation • RC obturation
		• Root canal treatment of an anterior tooth on a PATIENT

Record of this clinical work will be maintained in the Pre-clinical and **Clinical Quota Book**

LAHORE MEDICAL & DENTAL COLLEGE

SMALL GROUP DISCUSSIONS/BOOK READING TOPICS FOR FINAL YEAR BDS

Sr.no	Topic
1.	Liner & Bases, Pulp capping (direct & indirect)
2.	Preventive resin restoration & Fissure sealants
3.	Finishing & polishing of amalgam
4.	Types of bevel & retention of composite
5.	Types of $Ca(oH)_2$ & mechanism of action (setting reaction)
6.	Types of GICs & mechanism of action (setting reaction)
7.	Different Phases of Amalgam & Setting reaction, Delayed expansion of amalgam
8.	Finishing & polishing of composites
9.	Caries risk assessment
10.	Principles of cavity preparation
11.	Types of retainers(matrices)
12.	Class II amalgam cavity design
13.	Composition of different types of composites
14.	Micro leakage composites / amalgam
15.	Enamel adhesion
16.	Dentine adhesion & classification of dentinal adhesives
17.	Wet bonding / Dry bonding
18.	Common problems in composites restoration
19.	Dentine Hyper sensitivity
20.	Trauma

*Topics may be changed as per need

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DEPARTMENT OF OPERATIVE DENTISTRY
LAHORE MEDICAL AND DENTAL COLLEGE

SMALL GROUP DISCUSSIONS/BOOK READING
DAYS : Mondays & Tuesdays TIMINGS: 12:31-3:00 PM

Sr No.	Roll No.	Name	Groups
1			Group 1
2			
3			
4			
5			
6			Group 2
7			
8			
9			
10			
11			Group 3
12			
13			
14			
15			
16			Group 4
17			
18			
19			

Prof. Dr. Saima Razzaq Khan
Head of Operative Dentistry, LMDC

LAHORE MEDICAL & DENTAL COLLEGE

DEPARTMENT OF OPERATIVE DENTISTRY
LAHORE MEDICAL AND DENTAL COLLEGE

SMALL GROUP DISCUSSIONS/BOOK READING

Sr No.	Roll No.	Name	PG Incharge	Faculty Incharge
1				Dr Saima HOD (Resto)
2				
3				
4				Dr Anam (Resto/Endo)
5				
6				
7				Dr Moeen (Crown & Bridge)
8				
9				
10				
11				
12				Dr Noor Fatima (Academic Coordinator)
13				
14				
15				
16				
17				
18				
19				

Prof. Dr. Saima Razzaq Khan
Head of Operative Dentistry,LMDC

LAHORE MEDICAL & DENTAL COLLEGE

DEPARTMENT OF OPERATIVE DENTISTRY
LAHORE MEDICAL AND DENTAL COLLEGE

Operative Clinical Schedule 2025
Final year BDS (Batch wise Rotation)

DAYS	Clinic	Teacher
Monday	Restorative	Dr Anam/Dr Saima
Tuesday	Restorative	Dr Anam/ Dr Saima
Wednesday	Endo/Crown & Bridge	Dr Anam/Dr Moeen
Thursday	Paedodontics	Dr Moeen
Friday	Restorative	Dr Saima/Dr Anam

Prof. Dr. Saima Razzaq Khan
Head of Operative Dentistry
LMDC

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VII. DEPARTMENTAL TIME TABLE

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DAYS	OUTDOOR 8:00am-2:30 pm Supervision by on duty Post graduate trainee	INDOOR Clinical Registrar: Dr Saira Waheed , Academic Registrar: Dr Noor Fatima , Supervision by Post graduate Residents as allotted to each HO			
		8:00-10:00 AM	10:16-12:30 PM	12:31-2:00 PM	2:00-3:00pm
Monday	HO/PG	- Final year BDS Lecture - Clinical Registrar meeting - Clinical procedures of appointed patients by HOs/PGs	- Demo/ Clinical Supervision Final Year BDS (Restorative) - Clinical procedures of appointed patients by HOs/PGs - HO's Break (Half hour)	- Final year Tutorial - Clinical procedures of appointed patients by HOs/PGs	- Clinical procedures of indoor in patients
Tuesday	HO/PG	- Departmental Meeting - Journal Club seminar (PGs) - Clinical procedures of appointed patients by HOs/PGs	- Demo/ Clinical Supervision Final Year BDS (Restorative) - Clinical procedures of appointed patients by HOs/PGs - HO's Break (Half hour)	- Final year Tutorial - Clinical procedures of appointed patients by HOs/PGs	- Clinical procedures of indoor patients
Wednesday	HO/PG	- Final year BDS Lecture - Clinical procedures of appointed patients by HOs/PGs	- Final Year BDS Crown & Bridge/Endo/Paeds - Clinical procedures of appointed patients by HOs/PGs - HO's Break (Half hour)	- Final year Tutorial - Clinical procedures of appointed patients by HOs/PGs	- Clinical procedures of indoor patients
Thursday	HO/PG	- Final year BDS Lecture - Synopsis Discussion/ Clinical case presentations (PGs) - Endo clinic registrar meeting - Clinical procedures of appointed patients by HOs/PGs	- Final Year BDS Crown & Bridge/Endo/Paeds - Clinical procedures of appointed patients by HOs/PGs - HO's Break (Half hour)	- Final year Tutorial - Clinical procedures of appointed patients by HOs/PGs	- Clinical procedures of indoor patients

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Friday	HO/PG	- Operative House surgeon's Seminar - Clinical procedures of appointed patients by HOs/PGs	- Demo/ Clinical Supervision Final Year BDS (Restorative) - Clinical procedures of appointed patients by HOs/PGs - HO's Break (Half hour)	- Final year Tutorial - Clinical procedures of appointed patients by HOs/PGs	- Clinical procedures of indoor patients

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VIII. TEACHING AND LEARNING METHODOLOGIES

a. Large group teaching strategies:

- Lectures
- Interactive sessions

b. Small group teaching strategies:

1. Employed during practicals (daily) and tutorials (daily)
2. Interactive sessions
3. Literature reading
4. Video aids(Youtube Tutorials):

   https://youtu.be/w-VesKyomOU

   https://youtu.be/0rAMAqZVRnc

   https://youtu.be/Dw1bietb3LU

   https://youtu.be/9HnK8xOcLW8

   https://youtu.be/Ziy0oX1PRHQ

   https://youtu.be/vhab0vdtSEU

   https://youtu.be/V_gm-p00-yQ?si=X6hTzsmyeW6Foqaj

   https://youtu.be/ycdFgOJR3us?si=XuSFfieKHd06-bL2

   https://youtu.be/5foPGB75oaM?si=mQ8-cb3kV1JNffdq

   https://youtu.be/q61jeuNH6YU?si=gFvdxH5nnM52tON5
5. Small group discussions (SGDs)/Book Reading
6. Viva voce
7. Presentations by students
8. Clinical demonstrations and practicals

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IX. LEARNING RESOURCES

Reference Books

1. Sturdevant's Art and Science of Operative Dentistry:vTheodore M. Roberson, Herald O. Heymann, Edward J. Swift. (7th edition)
2. Sturdevant's Art and Science of Operative Dentistry, 2nd edition
3. Summitt's Fundamentals of Operative Dentistry- A Contemporary Approach (4th edition)
4. Endodontics: Principles and practice by Torabinjad. Richard E Walton, Mahmoud Torabinjad. (6th edition)
5. T.R Pitt Ford, FJ. Harty: Harty's endodontics in clinical practice. (5th edition)
6. Contemporary fixed prosthodontics by Stephan R. Rosenthal, 6th edition.
7. Schillingburg et al. Fundamentals of fixed prosthodontics, 4th edition.
8. Smith BGN. Planning and making crowns and bridges, 6th edition.
9. McDonald and Avery's Dentistry for the Child and Adolescent
10. Pediatric Dentistry-Infancy to Adolescent by Pinkham, Casamassimo
11. Handbook of Pediatric Dentistry by Angus C Cameron, Richard P Widmer
12. Paediatric Dentistry by Richard R. Welbury

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X. ASSESSMENT FORMATS

Academic Assessment Policy:

The annual academic session will consist of 7 monthly and quarterly assessments, at the end of each quarter

.● **Monthly assessment:**

Written assessment will be conducted every 1st week of the month

● **Midterm:**

Course will be decided according to the modules covered

Students will be assessed by theory, TOACS and viva

● **Sendup:**

Will be held after 9 months of session, in the yr 2026

Theory Examination(3 hours duration)

- Multiple choice questions (UHS pattern)

Viva/Oral Examination/OSCE

Clinical / Practical Examination

Will be conducted on the same day of viva, the pattern for the clinical exam will be the same as for the clinical test.

All results will be uploaded in the e-portal, and messaged to the students/parents.

Internal Assessment:

Will be based upon written test, OSCE (observed / unobserved), clinical tests, Open book test, presentations, quarterly assessments and hands on exercises & assignments and no of credits.

X. **ASSESSMENT FORMATS for Final yr**

Each week of the month is allotted to each final year subject as test week. One class test is conducted each month for Operative dentistry. Topics included in each test are notified and resources are identified.

a. Written tests

Written class tests include MCQs (one best type) . University recommendations for marks distribution are strictly followed. Summative and formative assessment will be done.

b. Clinical Test

It is held for each student during rotation in the Operative Department during 4th year BDS duties. Every clinical test will be followed by formative/ feedback assessment session.

Every student will perform one filling and will appear in chair side viva. Grading will be based on viva/oral examination, chair-side manners, cross infection control (aseptic technique), operator and patient positioning and clinical technique / proficiency, History, diagnosis and treatment planning.
Results with feedback will be posted immediately after the clinical test.

c. Oral examination

In order to prepare the students for oral component of university examination, viva voce examinations (by senior faculty members) are also conducted during the session.

d. Send up examination

Send up is a comprehensive examination including whole Operative dentistry course that is conducted at the end of academic session and final university examination pattern is followed in every respect (no. of questions, ToS, marks distribution, total time allowed etc.).

e. Internal Assessment

Will be based upon written test, clinical tests, presentations, and hands on exercises & assignments and no of credits.

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INSTRUCTIONS

"ALL STUDENTS MUST FOLLOW THE STANDARD PROTOCOL REGARDING CROSS INFECTION CONTROL IN THE CLINICS"

- Students should wear lab coats with neat dress.
- Students should follow the instructions from the teaching faculty.
- Students should report to the lab/clinics as per the scheduled time and should attend only in their respective groups.
- Students should keep their working table clean and do not damage any parts of the table. If any damage occurs, the particular student is responsible for the replacement of the damaged parts.
- Student should always maintain silence in the lab/clinics.
- Student should not leave any of their belonging after their session and if anything is lost, the college and the staff is not responsible.
- Attendance is compulsory. If anybody has shortage of attendance, appropriate action will be taken according to the college rules and regulations.
- Demonstrations will not be repeated for absent student regardless of reason of absence

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XI. ROBUST FEEDBACK SYSTEMs

a. Feedback on attendance

Attendance report is forwarded to students and parents on daily basis

b. Feedback on academic performance

Academic performance report is also regularly forwarded to students and parents. Moreover, individual students are given feedback on their academic performance during tutorials. MCQ and SEQ papers are also discussed with students in small groups.

c. Parents of weak students are regularly contacted (PTM sessions)

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XII. REMEDIAL CLASSES

Remedial classes will be carried out as for students who:

1. Have poor attendance less than 85%
2. Less than 50% in test performance

They will be scheduled every Wednesday from 1:30-2:30 pm.