LAHORE
MEDICAL & DENTAL
COLLEGE

College of Dentistry, Lahore Medical & Dental College

Study Guide

Oral Pathology

3rd YEAR BDS 2024

Oral Pathology Curriculum (2024)

LAHORE
MEDICAL & DENTAL
COLLEGE

Course Director:

Prof. Dr. Sadia Iqbal

B.D.S, M.Phil. (PB), MMEd. (Master in Medical Education)

Head of the Department Oral Pathology

Contributors:

Dr. Momin Ayub Marath	B.D.S ,MSc. (UK)	Professor
Dr. Rummana Aqeel	B.D.S, M.Phil	Assistant Professor

Co contributors:

Dr. Javeria Iftikhar	B.D.S	Demonstrator
Dr. Ayesha Tariq	B.D.S	Demonstrator

Contents

Vision of UHS

UHS shall continue to strive for producing a human resource par at excellence to cater for the health needs of the people of Punjab and Pakistan

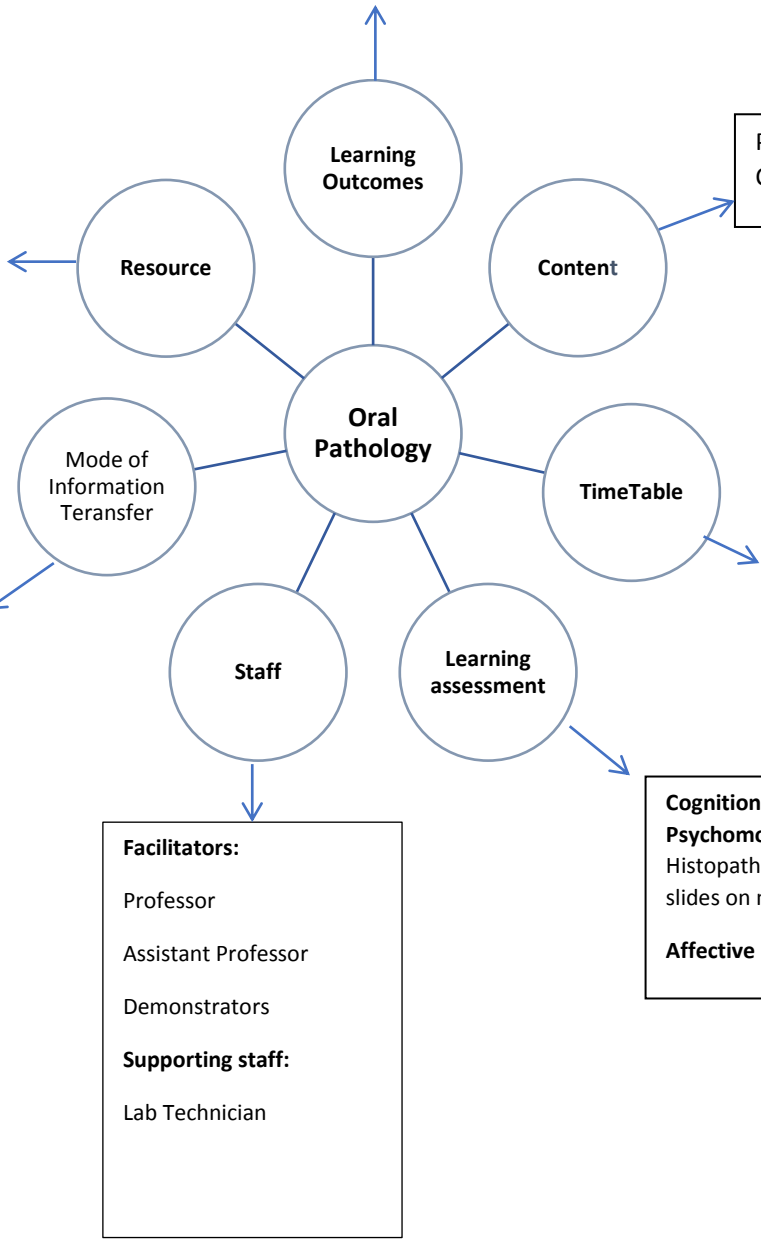
Mission Statement of Lahore Medical and Dental College

Our mission is to train future leaders of medicine who set new standards in knowledge, caring and compassion.

CURRICULAR MAP OF ORAL PATHOLOGY

By the end of 3rd Year learners will be able to achieve Cognitive proficiency in Differential Diagnosis on the basis of

- Pathogenesis
- Etiological factors
- Histopathological Features
- Radiographic Features
- Treatment Modalities



- Lecture Hall
- Oral pathology Lab
- Microscopes
- Study Models
- Library
- E books

PMC Guidelines for Oral Pathology Course

- Lectures
- Lab practical
- Tutorial
- Small group discussions
- Self study
- Assignment
    a. Class presentation
    b. Poster presentation
    c. 3D Models
- Hands - on

Course Duration: 165.5 hrs

- Lectures – 131
- Practical – 35
- Self Directed Learning – 30

Ratio – 50:35:15

Facilitators:

Professor

Assistant Professor

Demonstrators

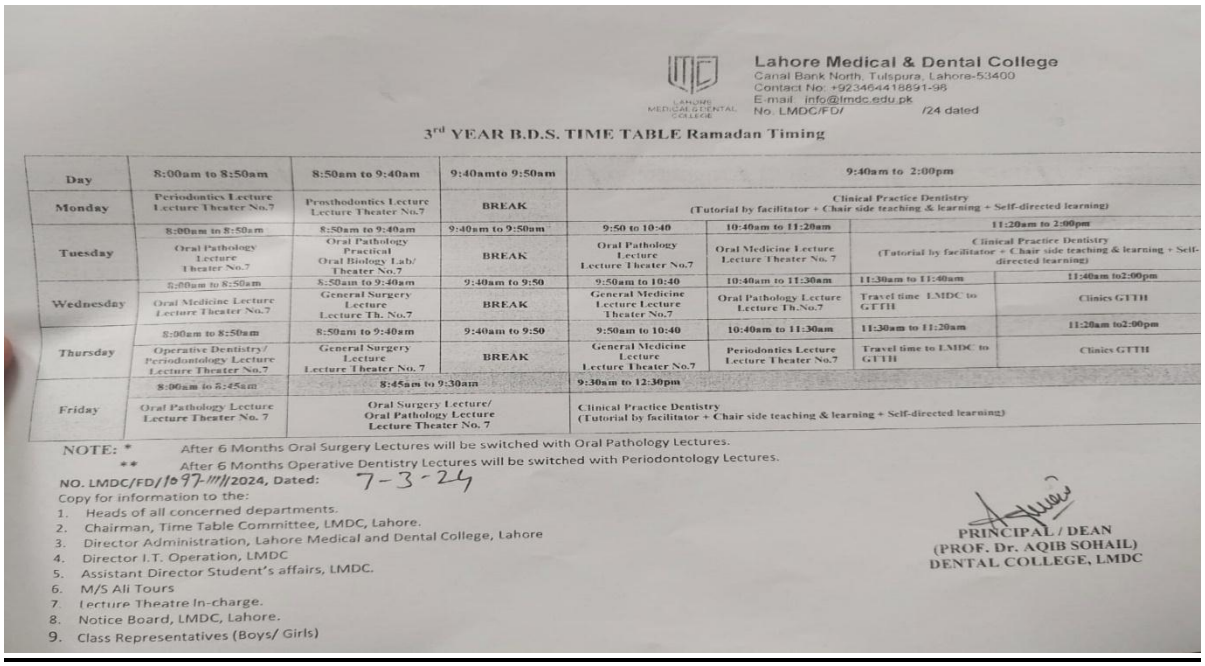
Supporting staff:

Lab Technician

Cognition Domain: MCQs ; SEQs,SAQs ; VIVA
Psychomotor Domain: OSPE ;Drawing of Histopathological Slides ; Identification of slides on microscope

Affective Domain: Portfolio

TIME TABLE 3rd YEAR BDS



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No. LMDC/FD/ /24 dated

3rd YEAR B.D.S. TIME TABLE Ramadan Timing

Day	8:00am to 8:50am	8:50am to 9:40am	9:40amto 9:50am	9:40am to 2:00pm			
Monday	Periodontics Lecture Lecture Theater No.7	Prosthodontics Lecture Lecture Theater No.7	BREAK	Clinical Practice Dentistry (Tutorial by facilitator + Chair side teaching & learning + Self-directed learning)			
Tuesday	8:00am to 8:50am: Oral Pathology Lecture Theater No.7	8:50am to 9:40am: Oral Pathology Practical Oral Biology Lab/ Theater No.7	9:40am to 9:50am: BREAK	9:50 to 10:40: Oral Pathology Lecture Lecture Theater No.7	10:40am to 11:20am: Oral Medicine Lecture Lecture Theater No. 7	11:20am to 2:00pm: Clinical Practice Dentistry (Tutorial by facilitator + Chair side teaching & learning + Self-directed learning)	
Wednesday	8:00am to 8:50am: Oral Medicine Lecture Lecture Theater No.7	8:50am to 9:40am: General Surgery Lecture Lecture Th. No.7	9:40am to 9:50: BREAK	9:50am to 10:40: General Medicine Lecture Lecture Theater No.7	10:40am to 11:30am: Oral Pathology Lecture Lecture Th.No.7	11:30am to 11:40am: Travel time LMDC to GTH	11:40am to2:00pm: Clinics GTH
Thursday	8:00am to 8:50am: Operative Dentistry/ Periodontology Lecture Lecture Theater No.7	8:50am to 9:40am: General Surgery Lecture Lecture Theater No. 7	9:40am to 9:50: BREAK	9:50am to 10:40: General Medicine Lecture Lecture Theater No.7	10:40am to 11:30am: Periodontics Lecture Lecture Theater No.7	11:30am to 11:20am: Travel time to LMDC to GTH	11:20am to2:00pm: Clinics GTH
Friday	8:00am to 8:45am: Oral Pathology Lecture Lecture Theater No. 7	8:45am to 9:30am: Oral Surgery Lecture/ Oral Pathology Lecture Lecture Theater No. 7		9:30am to 12:30pm: Clinical Practice Dentistry (Tutorial by facilitator + Chair side teaching & learning + Self-directed learning)			

NOTE: * After 6 Months Oral Surgery Lectures will be switched with Oral Pathology Lectures.
** After 6 Months Operative Dentistry Lectures will be switched with Periodontology Lectures.

NO. LMDC/FD/1097-111/2024, Dated: 7-3-24

Copy for information to the:
1. Heads of all concerned departments.
2. Chairman, Time Table Committee, LMDC, Lahore.
3. Director Administration, Lahore Medical and Dental College, Lahore
4. Director I.T. Operation, LMDC
5. Assistant Director Student's affairs, LMDC.
6. M/S Ali Tours
7. Lecture Theatre In-charge.
8. Notice Board, LMDC, Lahore.
9. Class Representatives (Boys/ Girls)

PRINCIPAL / DEAN
(PROF. Dr. AQIB SOHAIL)
DENTAL COLLEGE, LMDC

INTRODUCTION

- *"Oral pathology is the specialty of dentistry and discipline of pathology that deals with the nature, identification, and management of diseases affecting the oral and maxillofacial regions."*
- The department provides an overview of oral and maxillofacial pathology including the clinical Histopathology and Radiographic presentation of Oral diagnosis and pathogenesis. The study of microscope, tissue processing, diagnostic tests and advanced techniques are also included.

TARGET AUDIENCE

3RD Year BDS Students

General Objectives of Undergraduate:

Able to:

1-Recognize normal oral anatomy and variations of normal.
2- Relate oral pathology to other dental sciences.
3- Distinguish features of common oral diseases that help in its clinical diagnosis.
4- Achieve cognitive proficiency in differential diagnosis for common oral lesions or diseases.
5- Explain the pathogenesis and etiological factors of various oral diseases.
6- Connect histopathological features of oral lesions to its clinical presentation and management.

7- Demonstrate the skills of analytical problem solving, investigation, and self-development in the field of oral pathology.

TEACHING AND LEARNING STRATEGIES

(i) Strategies for achieving cognitive objectives

- Interactive lectures using audio visual aids on power point presentation
- Group discussions in form of large group and small group
- Collaborative learning
- Self-study and reading from learning resources

(ii) Strategies for achieving psychomotor objectives

- Focusing the histological slides on microscope
- Identification of normal histological structures on slides under different magnification
- Drawing and labeling the histological slides on practical notebooks

(iii) Strategies for achieving affective objectives

- Interaction with peers, group members, teachers, support staff etc.
- Group discussions (small and large)
- Oral presentations by students Knowledge and understanding :

TEACHING METHODOLOGIES FOR ORAL PATHOLOGY

1) Interactive Lectures
2) Tutorials
3) Practicals
4) Power point presentations by students
5) Small group discussions
6) Assignment
7) Self-directed learning
8) Discussion on last year UQS

ATTENDANCE REQUIREMENT FOR ORAL PATHOLOGY

1) Students are expected to attend all scheduled teaching sessions and examinations
2) Attendance in lectures and practicals is mandatory. Absence from these sessions will make the students ineligible to sit the final summative assessment.
3) A minimum of 75 % attendance in the lectures, practicals is mandatory to appear in the summative UHS examination
4) Attendance will be recorded through a log-in/log-out biometrics system
5) Absence due to illness must be certified appropriately by the General Physician

LEARNING RESOURCES

Recommended books

.1 Oral and Maxillofacial Pathology. 4 th Edition by BW Neville, DD Damn,CA Allen, A Chi.

2. Oral Pathology Soams, J.V. 4th Edition

3. Cawsons Essentials of Oral Pathology & Oral Medicine 9th Edition.

4. Oral Pathology Clinical Pathological Correlation Regezi , Joseph A, 7th Edition

5. Shafers Textbook of Oral Pathology 7th Edition.

Time Allocation for Academic Activities

Teaching activity	FREQUENCY/YEAR
Lectures	131
Practicals/ Tutorial	35
Small group Discussion	
Self Directed Learning	

COURSE OUTLINE (syllabus)

The course outline is as follows :

- Introduction to Oral Pathology
- Advanced diagnostic staining methods
- Wound healings
- Development disturbances of teeth & bone
- Infection of teeth & bone
- Odontogenic tumor
- Oral infections
- Epithelial disorders
- Bone pathology
- Immune mediated disorders
- Connective tissue lesions
- Salivary glands disorders
- Physical and chemical injuries
- Disorders of blood

PRACTICAL OUTLINE:

- **List of topics of Practicals & OSPE Examination :**
  - **Cysts of Head & Neck**
    - Periapical cyst
    - Dentigerous cyst
    - Odontogenic Keratocyst
    - Gingival cyst
    - Branchial cyst
    - Dermoid cyst
  - **Dental Caries / Pulp / Periapical Inflammation**
    - Dentinal caries
    - Chronic pulpitis
    - Pulp stones / Linear calcification
    - Periapical abscess
    - Periapical granuloma
    - Hyperplastic pulpitis

- **Benign Fibro-osseous / Bony lesion**
  - Periapical cemental dysplasia
  - Fibrous dysplasia
  - Giant cell lesions
  - Cherubism
  - Periapical giant cell granuloma
  - Central giant cell granuloma
  - Pagets disease
  - Osteoma
  - Osteochondroma
- **Malignant Bone tumors**
  - Osteosarcoma
  - Giant cell tumor
  - Ewing sarcoma
  - Multiple myeloma
  - Burkitt's lymphoma
- **Epithelial odontogenic tumors**
  - Follicular ameloblastoma
  - Reticular ameloblastoma
  - Basaloid ameloblastoma
  - Squamoid ameloblastoma
  - Adenomatoid odontogenic tumor
  - Odontogenic myxoma
  - Calcifying epithelial odontogenic tumor
  - Ameloblastic fibroma
  - Ameloblastic odontoma
- **Soft tissue lesions**
  - Lipoma
  - Lieomyoma
  - Neurofibroma / Schwannoma
  - Fibrosarcoma
  - Hemangioma / Lymphangioma
  - Granular cell lesion
  - Rhabdomyosarcoma
  - Leiomyosarcoma
- **Infectious diseases**
  - Herpes vesicle
  - TB Granuloma
  - Actinomycosis
  - Candida scrapings / Epithelial biopsy
  - Aspergillosis scrapings

- **Papillary lesions**
  - Squamous cell papilloma / Viral wart
  - Verrucous carcinoma
  - Granuloma pyogenicum
- **Pigmented lesions**
  - Intradermal / Intramucosal nevus
  - Melanoma

- **Vesiculobullous lesions**
  - Pemphigus vulgaris
  - Mucous membrane pemphigoid
- **Ulcerative lesions**
  - Non-specific ulcers
- **White lesions**
  - Dysplastic mucosa
  - Fordyce's granules
  - Cheek biting
  - Benign idiopathic leukoplakia
  - Squamous cell carcinoma
  - Basal cell carcinoma
- **Salivary gland Tumors**
  - Pleomorphic adenoma
  - Warthins tumor
  - Mucoepidermoid carcinoma
  - Canalicular tumor
  - Oncocytoma
  - Adenoid cystic carcinoma
  - Acinic cell tumor
  - Mucocele

- **List of Gross specimens**
  - Hemi-mandibulectomy specimen (Squamous cell carcinoma)
  - Hemi-mandibulectomy specimen
    - Multiloculated lesions(Ameloblastoma)
    - Sarcoma
  - Hemiglossectomy(Squamous cell carcinoma)
  - Lymph nodes
    - Tuberculous
    - Lymphomas
    - Metastatic
  - Maxillary specimen
  - Lipoma

- Dermoid cyst
- Pleomorphic adenoma (salivary glands)
- Other salivary gland lesions
- Teeth
    - Carious teeth
    - Pulp polyp
    - Dilaceration
    - Gemination / Fusion
    - Concresence
    - Odontoma
    - Periapical granuloma
    - Accessory roots / cusps
    - Dens evaginatus
    - Dens invaginatus
    - Talons cusp
    - Enamel pearls
    - Turners tooth

Assessment plan of Oral Pathology Department

- Small group discussion on different topics allotted to 3rd year BDS students
- Individual Presentations on allotted topics
- Posters related to different topics of Oral Pathology
- 3-D Models of gross specimens

PRESENTATION TOPICS

- Following topics were allotted to students for presentations:

SR. NO.	TOPIC
1-	Introduction/Classification of Connective Tissue disorders – Focal Fibrous Hyperplasia
2-	Peripheral Ossifying Fibroma
3-	Peripheral Giant Cell Granuloma
4-	Inflammatory Fibrous Hyperplasia
5-	Inflammatory Papillary Hyperplasia
9-	Hyperplastic Gingivitis
10-	Hereditary Gingival Fibromatosis
11-	Drug Induced Gingival Hyperplasia
12-	Classification of Benign neoplasms - Fibromatosis/Myofibromatosis/Desmoplastic Fibroma
13-	Nodular Fasciitis
14-	Benign Fibrous Histiocytoma
155-	Benign Solitary Fibrous Tumor
26-	Fibrosarcoma/Malignant Fibrous Histiocytoma/Malignant Solitary Fibrous Tumor
27-	Introduction of Neural tissue neoplasms- Traumatic neuroma
28-	Introduction of Neural tissue neoplasm – Palisaded Encapsulated Neuroma
29-	Multiple Endocrine Neoplasia Syndrome
30-	Neurilemoma
31-	Neurofibroma
32-	Granular Cell Tumor
33-	Congenital Gingival Granular Cell Tumor
34-	Neuroectodermal Tumor of Infancy
35-	Neurogenic Sarcoma
36-	Leiomyoma
37-	Rhabdomyosarcoma

38-	Lipoma
39-	Liposarcoma
40-	Pyogenic Granuloma
41-	Hemangioma
42-	Lymphangioma
43-	Angiosarcoma
44-	Kaposi Sarcoma
45-	Soft Tissue Osteoma
46-	Osseous & Cartilagenous Choristoma
47-	Myositis Ossificans

Feedback on Oral Presrntations

Assessment

FORMATIVE ASSESSMENT METHODOLOGY

SUMMATIVE ASSESSMENT METHODOLOGY

FORMATIVE ASSESSMENT METHODOLOGY

- Topics test : At the completion of every chapter. Consisting of MCQs, SEQs OSPE on pattern of university exam
- Term test after 3-4 months of academic session: Conducted in coordination with other subjects
- Send up examination

SUMMATIVE ASSESSMENT METHODOLOGY

3RD PROFESSIONAL UNIVERSITY EXAMINATION

Total Marks: 200

WRITTEN EXAM = 90 Marks	**VIVA/ORAL & PRACTICAL EXAMINATION = 90 Marks**	**INTERNAL ASSESSMENT = 20 Marks**
SEQs: 45 Marks		Attendance: 5 Marks
MCQs: 45 Marks		
Internal assessment marks=10		Class Tests: 4 Marks
		Presentation: 4 Marks
		3D Models/Posters: 3 Marks
		Log Book/Send-Up: 2 Marks
		Behavior/Attitude: 2 Marks

Practical Total Marks =100

- **VIVA 50 marks**

Examiner I (Internal) =25 Marks Examiner 2 (External)=25 Marks

- **Practical (OSPE • Draw and label Task) 40 marks**

OSPE Total = 15 Stations

Practical Notebook 5 marks

- **Internal Assessment marks =10**

ALIGNMENT OF EDUCATION WITH STUDY HOURS (3rd year BDS)

Lecture no.	Topic	Sub-topic	Facilitator
1	**Introduction**	Introduction to Oral Pathology Overall review Definitions Common terms	**Dr. Rummana Aqeel**
2		Terminologies Epithelial Radiographic	

Lecture no.	Topic (Chapter)	Sub topic	Teacher Name
1	**Developmental Disturbances in Oral Region.**	Teeth: Disturbances in Size Disturbances in Number Disturbances in Eruption	**Prof.Dr Sadia Iqbal**
2		Teeth: Disturbances in Shape	
3		Teeth: Disturbances in Structure of Enamel	
4		Teeth: Disturbances in Structure of Dentin Disturbances in Structure of Cementum	
5		Soft tissue Congenital Lip Pits Double Lip Frenal Tag Ankyloglossia	
6		Soft tissue: Macroglossia Fordyce Granules Leukoedema	
7		Soft tissue: White Sponge Nevus Lingual Thyroid Nodule Oral Tonsil Retrocuspid Papilla	
8		Bone: Hemifacial Hypertrophy Hemifacial Atrophy Cleft Lip and Cleft Palate	
9		Bone: Lingual Mandibular Salivary Gland Depression Focal Osteoporotic Bone Marrow Defect Cleidocranial Dysplasia Crouzon Syndrome	
10		Bone: Treacher Collins Syndrome Down Syndrome Oral-Facial-Digital Syndrome Papillon-Lefèvre Syndrome	
11		Tutorial	
12		Test	

Lecture no.	Topic (Chapter)	Sub topic	Teacher Name
1	**Cysts of the Oral Regions**	ODONTOGENIC CYSTS Cysts Derived from Rests of Malassez Periapical Cyst Cysts Derived from Reduced Enamel Epithelium	**Prof.Dr Sadia Iqbal**
2		Dentigerous Cyst Eruption Cyst Paradental Cyst Cysts Derived from Dental Lamina	
3		Odontogenic Keratocyst	
4		Lateral Periodontal Cyst Gingival Cyst of Adult Dental Lamina Cyst of Newborn Glandular Odontogenic Cyst	
5		Cysts of Vestigial Ducts Nasopalatine Duct Cyst Nasolabial Cyst Lymphoepithelial Cysts Oral Lymphoepithelial Cyst	
6		Cervical Lymphoepithelial Cyst Cyst of Vestigial Tract Thyroglossal Tract Cyst Cysts of Embryonic Skin	
7		Dermoid Cyst Epidermoid Cyst Cysts of Mucosal Epithelium Surgical Ciliated Cyst of Maxilla Heterotopic Oral Gastrointestinal Cyst	
8		Pseudocyst	
9		Tutorial	
10		Test	

Lecture no.	Topic (Chapter)	Sub topic	Teacher Name
1	**Odontogenic Tumors**	EPITHELIAL ODONTOGENIC TUMORS Ameloblastoma Common Ameloblastoma Unicystic Ameloblastoma	**Prof.Dr Sadia Iqbal**
2		EPITHELIAL ODONTOGENIC TUMORS Peripheral Ameloblastoma Calcifying Epithelial Odontogenic Tumor	
3		EPITHELIAL ODONTOGENIC TUMORS Adenomatoid Odontogenic Tumor Calcifying Odontogenic Cyst Squamous Odontogenic Tumor	
4		CONNECTIVE TISSUE ODONTOGENIC TUMORS	
5		CONNECTIVE TISSUE ODONTOGENIC TUMORS	
6		MIXED ODONTOGENIC TUMORS	
7		MIXED ODONTOGENIC TUMORS	
8		MALIGNANT ODONTOGENIC TUMORS	
9		MALIGNANT ODONTOGENIC TUMORS	
10		Small group Discussion	

11		Tutorial	
12		Test	

Lecture no.	Topic (Chapter)	Sub topic	Teacher Name
1	**Bone Lesions**	BENIGN FIBRO-OSSEOUS LESIONS	**Prof.Dr Sadia Iqbal**
2		BENIGN FIBRO-OSSEOUS LESIONS	
3		BENIGN FIBRO-OSSEOUS LESIONS	
4		METABOLIC CONDITIONS	
5		METABOLIC CONDITIONS	
6		BENIGN TUMORS	
7		BENIGN TUMORS	
8		MALIGNANT TUMORS	
9		Tutorial	
10		Test	

Lecture no.	Topic (Chapter)	Sub topic	Teacher Name
1	**Salivary Gland Disorders**	REACTIVE LESIONS	**Prof.Dr Sadia Iqbal**
2		REACTIVE LESIONS	
3		REACTIVE LESIONS	
4		INFECTIONS	
5		INFECTIONS	
6		IMMUNE-MEDIATED DISEASES	
7		IMMUNE-MEDIATED DISEASES	
8		BENIGN SALIVARY GLAND TUMORS	
9		BENIGN SALIVARY GLAND TUMORS	
10		BENIGN SALIVARY GLAND TUMORS	
11		MALIGNANT SALIVARY GLAND TUMORS	
12		MALIGNANT SALIVARY GLAND TUMORS	
13		MALIGNANT SALIVARY GLAND TUMORS	
14		Tutorial	
15		Test	

Lecture no.	Topic (Chapter)	Sub topic	Facilitator
1		Introduction	
2		RECURRENT APHTHOUS STOMATITIS Associated Systemic Conditions Aphthous	

	Immune Mediated	Minor Aphthous Major	**Dr Momin Ayub**
3		RECURRENT APHTHOUS STOMATITIS Herpetiform Ulcers Behçet Syndrome	
4		MUCOSAL AND SKIN CONDITIONS Lichen Planus Lichenoid Reactions	
5		Mucous Membrane Pemphigoid	
6		Pemphigus Vulgaris	
7		Epidermolysis Bullosa Erythema Multiforme	
8		Lupus Erythematosus Systemic Lupus Erythematosus Subacute Cutaneous Lupus Erythematosus Discoid Lupus Erythematosus	
9		Progressive Systemic Sclerosis	
10		ALLERGIC REACTIONS Contact Stomatitis	
11		Angioedema	
12		POSSIBLE IMMUNE-MEDIATED REACTIONS Cheilitis Glandularis Orofacial Granulomatosis Oral Crohn Disease Cheilitis Granulomatosa Melkersson-Rosenthal Syndrome	
13		Chronic Granulomatous Disease Sarcoidosis	
14		Pyostomatitis Vegetans Wegener Granulomatosis	
15		Test	

Lecture no.	**Topic (Chapter)**	**Sub topic**	**Facilitator**
1	**Blood Disorders**	Red Blood Cells Anemias Iron deficiency anemia Pernicious Anemia Sickle Cell Amemia Thalassemia Fetal erythroblastosis	**Dr Momin Ayub**
2		White Blood Cells Leukopenia Agranulocytosis Cyclic Neutropenia Neutrophil Function Disorders Chronic Granulomatous Disease of Childhood	

3		Leukocytosis Bacteria-Associated Leukocytosis Virus-Associated Leukocytosis Infectious mononucleosis	
4		Neoplasms Leukemia Hodgkin Lymphoma Non-Hodgkin Lymphoma	
5		MALT Lymphoma Burkitt Lymphoma Multiple lymphoma	
6		Platelet Disorders Thrombocytopenia Thrombasthenia Capillary Fragility Vitamin C Deficiency (Scurvy) Hereditary Hemorrhagic Telangiectasia Coagulation Disorders Hemophilic	

Lecture no.	**Topic (Chapter)**	**Sub topic**	**Facilitator**
1	**Physical and Chemical Injuries**	**PHYSICAL INJURIES** Teeth Attrition Abrasion Erosion Fracture	**Dr Momin Ayub**
2		Avulsion Internal Resorption External Resorption Ankylosis	
3		**Gingiva** Toothbrush Trauma Toothpick Injury **Tongue** Traumatic Atrophic Glossitis Benign Migratory Glossitis Hairy Tongue	
4		Fissured Tongue Chronic Ulcers **Mucosal Tissue Factitious Injuries** Denture Injuries Electrical Burns Thermal Burns	
5		**Radiation Injuries** Radiation Mucositis Xerostomia Radiation Caries Osteoradionecrosis Soft Tissue Radiation Injuries	
6		**CHEMICAL INJURIES**: Teeth	

7		**CHEMICAL INJURIES**: Gingiva	
8		**CHEMICAL INJURIES**: Mucosal Tissue	
9		Tutorial	
10		Test	

NO.of lectures	TOPIC	SUB TOPICS	Facilitator
1	**Connective Tissue Disorders**	Introduction/Classification of Connective Tissue disorders – Focal Fibrous Hyperplasia Peripheral Ossifying Fibroma Peripheral Giant Cell Granuloma	**Dr Rummana**
2		Inflammatory Fibrous Hyperplasia Inflammatory Papillary Hyperplasia Hyperplastic Gingivitis Hereditary Gingival Fibromatosis	
3		Drug Induced Gingival Hyperplasia Classification of Benign neoplasms - Fibromatosis/Myofibromatosis/Desmoplastic Fibroma	
4		Nodular Fasciitis Benign Fibrous Histiocytoma Benign Solitary Fibrous Tumor	
5		Fibrosarcoma/Malignant Fibrous Histiocytoma/Malignant Solitary Fibrous Tumor Introduction of Neural tissue neoplasms-Traumatic neuroma	**Dr Momin**
6		Introduction of Neural tissue neoplasm – Palisaded Encapsulated Neuroma Multiple Endocrine Neoplasia Syndrome	
7		Neurilemoma Neurofibroma Granular Cell Tumor	
8		Congenital Gingival Granular Cell Tumor Neuroectodermal Tumor of Infancy Neurogenic Sarcoma	
9		Leiomyoma Rhabdomyosarcoma	
10		Lipoma Liposarcoma Pyogenic Granuloma	
11		Hemangioma Lymphangioma	
12		Angiosarcoma Kaposi Sarcoma	

13		Soft Tissue Osteoma Osseous & Cartilagenous Choristoma Myositis Ossificans	
14		Tutorial	
15		Test	

Lecture No.	Topic	Sub-Topic	Facilitator
1	**Infections Of Teeth and Bone**	**DENTAL CARIES** Theories	**Dr. Rummana Aqeel**
2		**DENTAL CARIES** Types Classification Plaque Stephens curve Role of saliva	
3		**DENTAL CARIES** Plaque	
4		**DENTAL CARIES** Stephan's curve Role of saliva	
5	**Infections of Teeth and Bone**	**DENTAL CARIES** Enamel caries	
6		**DENTAL CARIES** Dentinal caries	
7		**PULPITIS** Reversible pulpitis Irreversible pulpitis	**Dr. Rummana Aqeel**
8		**PULPITIS** Pulp necrosis	
9		**PULPITIS** Common diagnostic techniques	
10		**PULPITIS** Histopathology of pulpal disease -Acute pulpitis	
11		**PULPITIS** Histopathology of pulpal disease	

		-Chronic pulpitis -Chronic hyperplastic pulpitis	
12		**PERIAPICAL LESIONS** Chronic apical periodontitis Periapical granuloma	
13		**PERIAPICAL LESIONS** Periapical cyst	
14		**ACUTE PERIAPICAL CONDITION** Periapical abscess	
15		**OSTEOMYELITIS** Acute osteomyelitis	
16		**OSTEOMYELITIS** Cellulitis	
17		**OSTEOMYELITIS** Chronic Osteomyelitis Garre Osteomylelitis	
18		**TUTORIAL**	
19		**TEST**	
Lecture no.	**Topic**	**Sub-Topic**	**Facilitator**
1	**ORAL INFECTIONS (Viral infections)** **ORAL INFECTIONS (Viral Infections)**	**HERPES VIRUSES** Herpes Simplex virus Varicella-Zoster virus	**Dr. Rummana Aqeel** **Dr. Rummana Aqeel**
2		**HERPES VIRUSES** Epstein-Barr virus Cytomegalovirus Human Herpesvirus 6,7 and 8	
3		**COXACKIE VIRUSES** Herpangina Hand, Foot and Mouth disease Acute Lymphonodular Pharyngitis	
4		**TOGAVIRUS** Rubella **PARAMYXOVIRUSES** Measles Mumps (Epidermis Parotitis)	
5		**HUMAN PAPILLOMA VIRUS** Squamous Papilloma Verruca Vulgaris	
6		**HUMAN PAPILLOMA VIRUS** Condyloma Acuminatum Focal Epithelial Hyperplasia	
7		**RETEROVIRUSES** Human Immunodeficiency Virus -Stages -Hairy leukoplakia	

8		**RETEROVIRUSES** -Candidiasis -Deep invasive fungal infections -Gingivitis and Periodontitis associated with HIV -Kaposi sarcoma -Non-hodgkin lymphoma	
9		-Kaposi sarcoma -Non-hodgkin lymphoma	
10		**Tutorial**	
Lecture no.	**Topic (Chapter)**	**Sub topic**	**Facilitator**
1	**Bacterial Infections**	Pharyngitis and Tonsillitis Scarlet fever Impetigo	**Dr Momin Ayub**
2		Osteomyelitis Tuberculosis	
3		Syphilis Oral-Cervical Actinomycosis	
4		Tutorial	
Lecture no.	**Topic (Chapter)**	**Sub topic**	**Facilitator**
1	**Oral Infections**	Fungal Infections	**Prof.Dr Sadia Iqbal**
2		Fungal Infections	
3		Fungal Infections	
4		Small Group Discussion	
5		Test	

Lecture no.	**Topic (Chapter)**	**Sub topic**	**Facilitator**
1	**Epithelial Disorders**	Introduction	**Dr. Rummana Aqeel**
2		BENIGN EPITHELIAL LESIONS	
3		BENIGN PIGMENTED LESIONS Melanotic Macules Smoker's Melanosis	
4		Nevi	
5		Seborrheic Keratosis, Actinic Lentigo Peutz-Jeghers Syndrome	
6		Melasma Acanthosis Nigricans	
7		LEUKOPLAKIA	
8		EPITHELIAL HYPERPLASIA Hyperkeratosis Acanthosis	
9		Nicotine Stomatitis Proliferative Verrucous Leukoplakia	
10		EPITHELIAL ATROPHY Oral Submucous Fibrosis	

11		EPITHELIAL DYSPLASIA Carcinoma In Situ	
12		ERYTHROPLAKIA	
13		MALIGNANT EPITHELIAL NEOPLASMS Squamous Cell Carcinoma	
14		Carcinogenic Factors	
15		Sites and Incidene	
16		Metastasis Less Common Forms of Squamous Cell Carcinoma	
17		MELANOMA Skin and Mucosal Melanoma Superficial Spreading Melanoma	
18		Lentigo Maligna Melanoma Acral Lentiginous Melanoma Nodular Melanoma	
19		METASTASES TO THE JAWS	
20		Tutorial	
21		Test	

No of lectures	**Topic**	**Subtopic**	**Facilitator**
1	Wound healing	Wound healing	Dr Momin
2		Role in dentistry	

3rd yr BDS

LECTURE ALLOCATION 2024

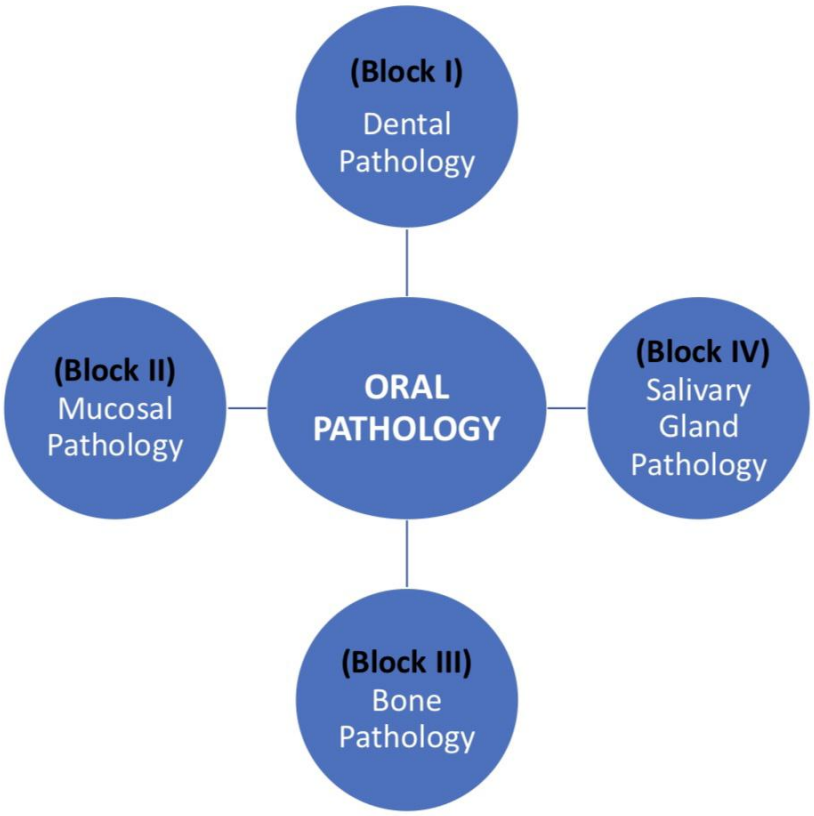
Total # of lectures in 36 weeks: = 131

	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	TOTAL
Introduction to Oral Pathology	2										2
Infections of Teeth and Bone	3	4	4	1	4	2					18
Physical & chemical injuries	6	1									7
Developmental disturbances of teeth and oral region	3	7	5								15
Immune mediated disorders		5	4	2	5						16
Odontogenic tumors			2	6	1						9
Odontogenic cysts					5						5
Diseases of Blood					5						5
Epithelial disorders						4	6	4			14
Salivary gland disorders						3	3				6
Oral infections							1	9	8		18
Bone lesions							1	7			8
Connective tissue disorders									7		7
Wound healing										1	1
TOTAL	14	17	15	9	20	9	11	20	15	1	131

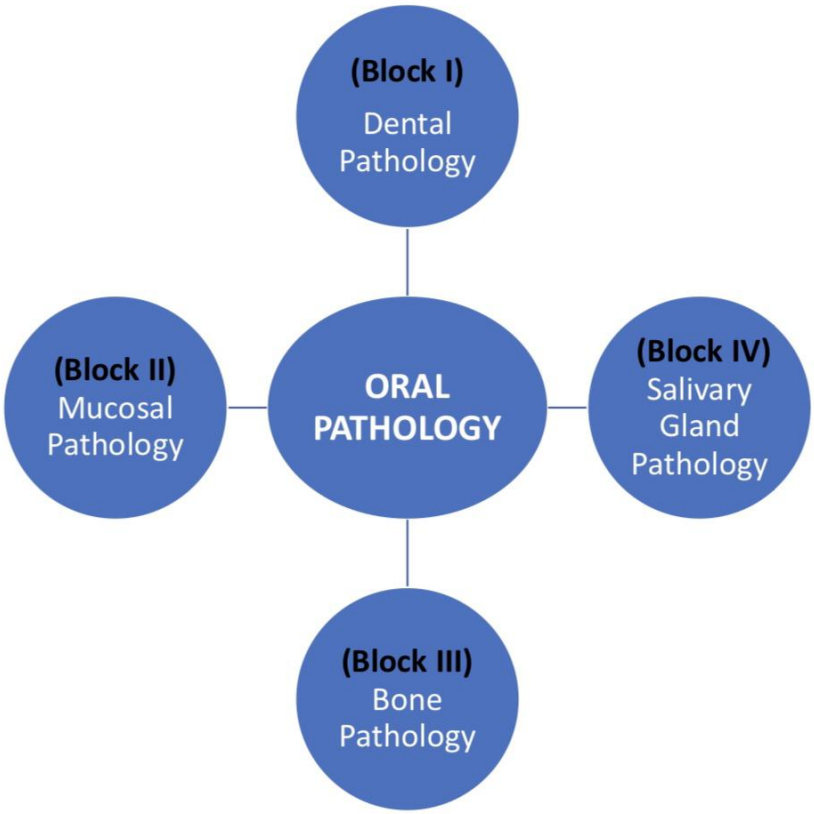
TIMELIINE ORAL PATHOLOGY TOPICS 2024

1	March	• Introduction to Oral Pathology • Infections of Teeth and Bone • Developmental Disturbances of Oral Regions • Physical & chemical injuries
2	April	• Developmental Disturbances of Oral Regions • Physical & chemical injuries • Infections of teeth & bone • Immune mediated disorders
3	June	• Immune Mediated Disorders • Infections of teeth & bone • Odontogenic tumors
4	July	• Infections of teeth & bone • Immune mediated disorders • Odontogenic tumors • Odontogenic cysts • Blood disorders
5	August	• Infections of teeth & bone • Epithelial disorder • Salivary gland disorders • **Mid- term exam**
6	September	• Epithelial disorders • Salivary gland disorders • Oral infections
7	October	• Epithelial disorders • Oral infections • Bone lesions
8	November	• Oral infections • Connective tissue disorders
9	December	• Wound healing • **Send-up assessment**
11	January	Prep leave for Professional Exam

Oral Pathology
Learning Outcomes



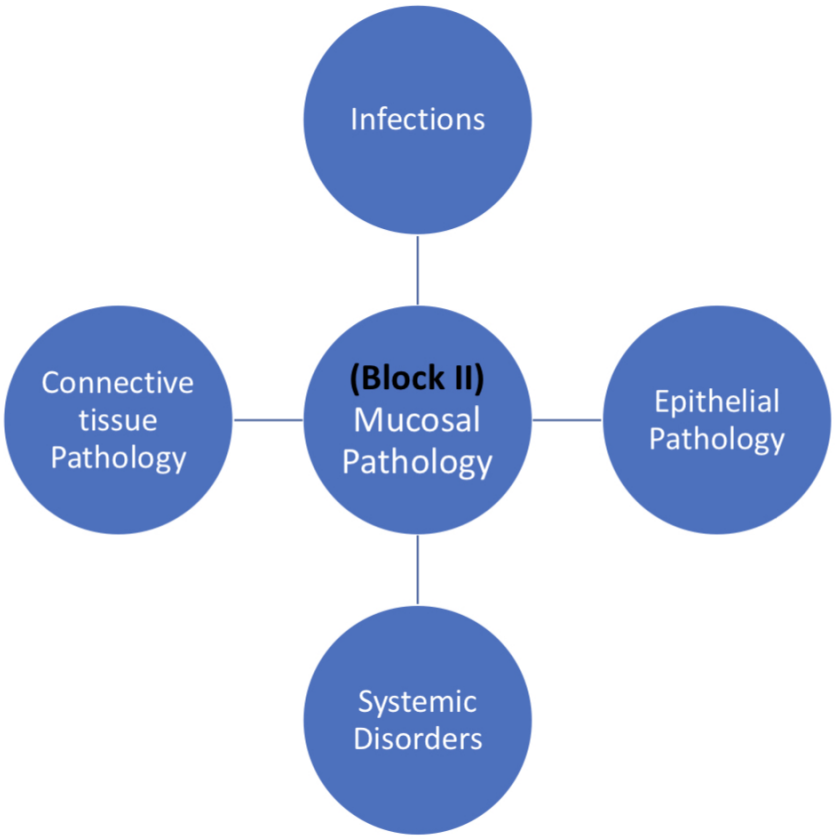
Oral Pathology
Learning Outcomes

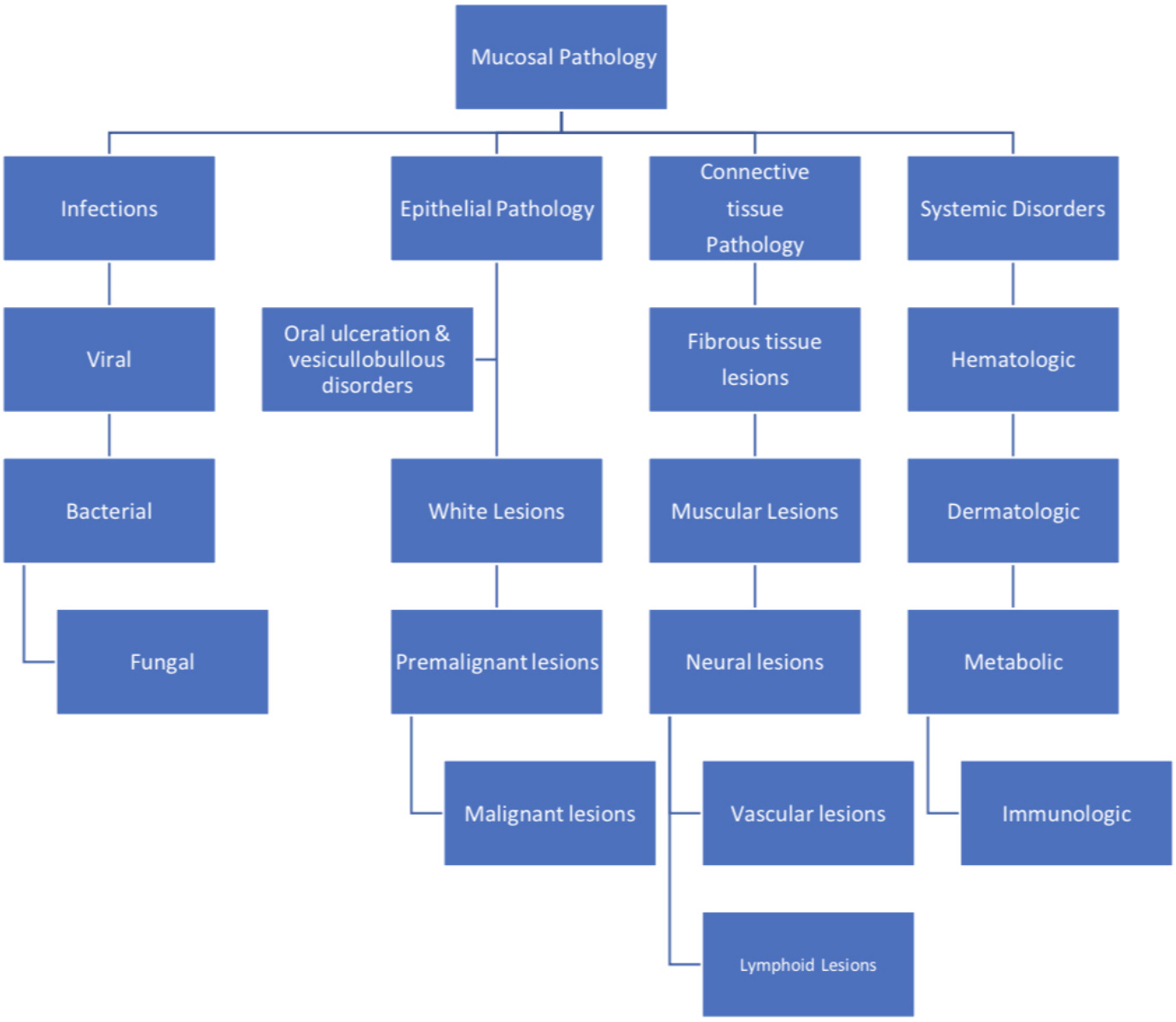


BLOCK I - DENTAL PATHOLOGY

Sr.	Topic	Learning Objectives	Instructional strategies	Assessment Tools
1	Abnormalities of teeth	1. Define and enlist all developmental anomalies affecting the number, size shape and structure of teeth. 2. Differentiate between developmental and environmental abnormalities. 3. Describe in detail the pathogenesis, clinical and radiographical presentation of Amelogenesis Imperfecta, Dentinogenesis Imperfecta and Dentine dysplasia. 4. Diagnose common dental pathologies and apply the knowledge in the clinical practice.	Interactive lecture	MCQs SEQs OSPE Viva
2	Dental Caries	1. Define caries and enlist etiological factors. 2. Discuss the etiological factors in detail. 3. Explain the interplay of etiological factors and their role in the pathogenesis of caries in detail. 4. Describe the histopathological features of enamel and dentine caries. 5. Corelate the mechanism of carious lesion with the clinical presentation.	Interactive lecture & SGD	MCQs & SEQs OSPE Viva
3	Pulp Pathology	1. Define and classify pulpitis. 2. Describe the etiology and pathogenesis of	Interactive lecture	MCQs SEQs OSPE Viva

		pulpitis. 3. Explain the clinical, radiographical and histopathological features of pulpitis. 4. Define and enlist causes of periapical periodontitis. 5. Briefly discuss sequelae of periapical periodontitis. 6. Explain the spread of periapical inflammation with emphasis on details of Cellulitis (Ludwig's Angina). 7. Relate and apply the concepts of pulp pathology in clinical practice.		
4	Other Disorders	1. Define disorders of eruption and shedding of teeth. 2. Define and briefly describe the predisposing factors of various types of Non- bacterial tooth loss. 3. Define and explain the pathogenesis along with the clinical and histological features of internal and external tooth resorption. 4. Classify causes of tooth discoloration with brief knowledge of underlying causative agents. 5. Relate and apply the concepts in clinical practice.	Interactive Lecture	MCQs SEQs OSPE Viva
5	Periodontal Pathology	To avoid overlapping with Periodontology we do not teach this topic.		


Infections
Connective tissue Pathology
(Block II) Mucosal Pathology
Epithelial Pathology
Systemic Disorders


Mucosal Pathology
Infections
Epithelial Pathology
Connective tissue Pathology
Systemic Disorders
Viral
Oral ulceration & vesicullobullous disorders
Fibrous tissue lesions
Hematologic
Bacterial
White Lesions
Muscular Lesions
Dermatologic
Fungal
Premalignant lesions
Neural lesions
Metabolic
Malignant lesions
Vascular lesions
Immunologic
Lymphoid Lesions

BlOCK II (MUCOSAL PATHOLOGY)

Sub-Category: Infections

Sr.	Topic	Learning Objectives	Instructional strategies	Assessment Tools
1	Viral Infections	1. Enlist different types of viral infections affecting the oral cavity. 2. Explain in detail the predisposing factors, etiology, clinical presentation and histology of herpes simplex virus, varicella zoster virus, paramyxo virus, Epstein barr virus and HIV infection. 3. Briefly describe the oral manifestations of Coxackie virus, Human papilloma virus and cytomegalo virus infection. 4. Generate differential diagnosis of various viral infections. 5. Co-relate and apply the knowledge in the clinical practice.	Interactive Lecture	MCQs SEQs OSPE Viva
2	Bacterial Infections	1. Enlist common bacterial infections along with causative bacterial organism affecting the oral cavity. 2. Briefly describe the pathogenesis, clinical presentation and histopathology of Noma, syphilis and leprosy. 3. Describe in detail the pathogenesis, clinical presentation, histopathology and diagnostic tests required	Interactive Lecture	MCQs SEQs OSPE Viva

		for Actinomycosis and Tuberculosis.		
3	Fungal Infections	1. Differentiate between basic types of fungal infections. 2. Explain in detail the predisposing factors, clinical presentation and histology of oral candida infection. 3. Generate differential diagnosis of various fungal infections. 4. Correlate and apply the knowledge in the clinical practice. 5. Enlist deep fungal infections along with very brief clinical and histological appearance.	Interactive Lecture Histopathological slide study	MCQs SEQs OSPE Viva

Sub-Category: Epithelial Pathology

Sr.	**Topic**	**Learning Objectives**	**Instructional strategies**	**Assessment Tools**
1	White Lesions	1. Define and classify white lesions of oral cavity with brief description of histological features. 2. Briefly describe the hereditary and traumatic white lesions. 3. Define and explain in detail the clinical presentation and histology of leukoplakia, oral sub mucous fibrosis and lichen planus. 4. Define and differentiates between the cytological	Interactive Lecture Histopathological slide study	MCQs SEQs OSPE Viva

		and histological features of Dysplasia in detail. 5. Generate the differential diagnosis of various white lesions. 6. Relate this knowledge in clinical practice.		
2	Premalignant Lesions	1. Define and enlist premalignant lesions. 2. Highlight the importance of these lesions in clinical practice. 3. Explain the histopathological features in detail.	Interactive Lecture SDG	MCQs SEQs OSPE Viva
3	Oral Ulcerations & Vesiculobullous disorders	1. Define and enlist causes of oral ulceration. 2. Describe the etiology, pathogenesis, clinical presentation and histological features of Recurrent Aphthous ulcers in detail.	Interactive Lecture Histopathological slide study	MCQs SEQs OSPE Viva
4	Malignant Lesions	1. Define and elaborate etiological factors of OSCC. 2. Explain the mechanism of carcinogenesis at molecular level. 3. Elaborate and distinguish between clinical features of early and advanced oral cancer particularly OSCC. 4. Identify and describe in detail the histopathological features in detail. 5. Relates the prognosis of OSCC with the grading and staging systems. 6. Enlist variants of OSCC. 7. Define and classify, with emphasis on the	Interactive Lecture Histopathological slide study SDG	MCQs SEQs OSPE Viva

		clinical presentation of benign and malignant melanocytic lesions. 8. Interpretation of these concepts in clinical practice.		

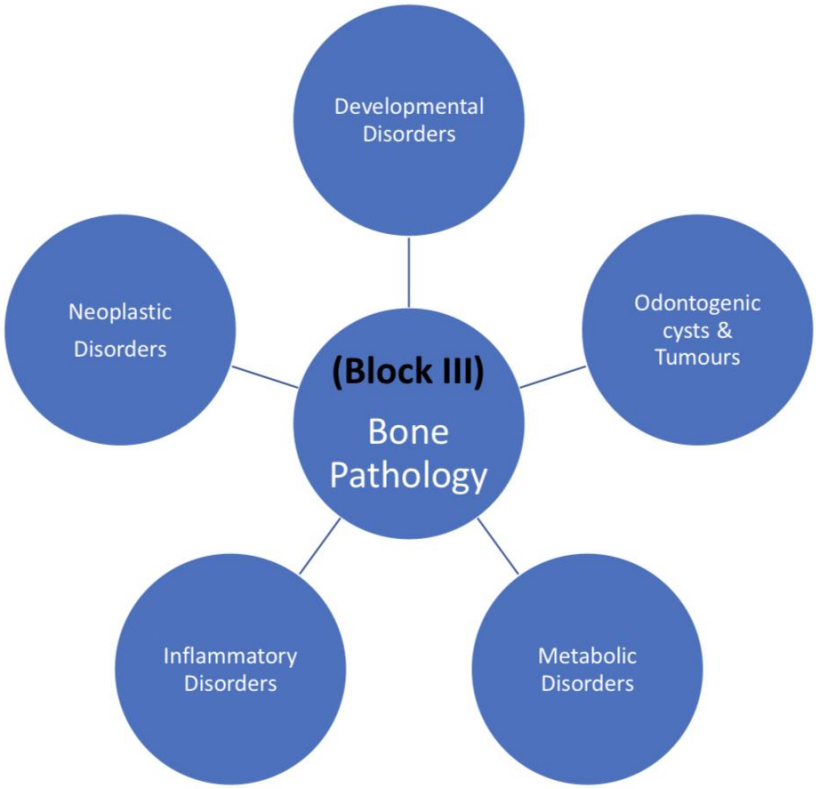
Sub-category: Connective Tissue Pathology

Sr.	Topic	Learning Objectives	Instructional strategies	Assessment Tools
1	Fibrous Lesions	1. Enlist various fibrous tissue lesions with brief description of clinical and histological features. 2. Generate differential diagnosis based on the clinical and histological features. 3. Enlist and discuss in detail the clinical aspect of various denture induced lesions affecting the oral mucosa. 4. Relate and apply this knowledge in the clinical practice.	Interactive Lecture Histopathological slide study	MCQs SEQs OSPE Viva
2	Muscular Lesions	1. Define and classify connective tissue lesions on the basis of tissue of origin. 2. Distinguish between benign and malignant neoplasms of smooth and skeletal muscle origin. 3. Demonstrate and diagnose histopathological features of common lesions with the help of light microscopy.	Interactive Lecture	MCQs SEQs OSPE Viva
3	Neural Lesions	1. Define and enlist	Interactive Lecture	MCQs

		various connective tissue lesions of neural origin. 2. Briefly describe the clinical and histological features of Granular cell tumor, Schwannoma and neurofibromatosis. 3. Demonstrate and diagnose histopathological features of common lesions with the help of light microscopy.		SEQs OSPE Viva
4	Vascular Lesions	Define and classify vascular lesions. 2. Compare vascular anomalies like hemangiomas and AV malformations on clinical grounds.	Interactive Lecture Histopathological slide study	MCQs SEQs OSPE Viva
5	Lymphoid Lesions	1. Define and classify malignant lymphoma. 2. Explain the clinical presentation in detail. 3. Briefly describe the histology of basic types of lymphomas.	Interactive Lecture Histopathological slide study	MCQs SEQs OSPE Viva

Sub-category: Systemic Pathology

Sr.	Topic	Learning Objectives	Instructional strategies	Assessment Tools
1	Hematological Disorders	All of these are major components of Oral Medicine syllabus, thus are not taught in Oral Pathology.	Not Applicable	Not Applicable
2	Dermatological Disorders			
3	Immunological Disorders			
4	Nutritional Disorders			

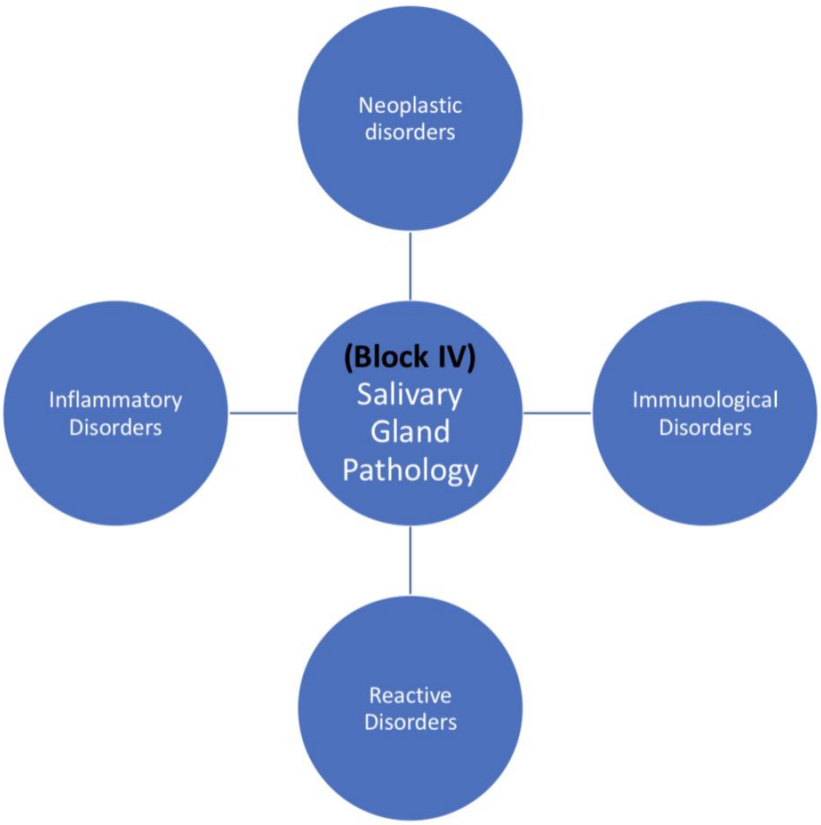

Developmental Disorders
Neoplastic Disorders
Odontogenic cysts & Tumours
(Block III)
Bone Pathology
Inflammatory Disorders
Metabolic Disorders

BLOCK III - BONE PATHOLOGY

Sr.	Topic	Learning Objectives	Instructional strategies	Assessment Tools
1	Odontogenic Cysts & Tumors	1. Define and classify Odontogenic cysts & tumors. 2. Explain pathogenesis of common odontogenic cysts. 3. Describe clinical, radiographical and histopathologic al features of Jaw cysts and tumors. 4. Identify and draw histopathologic al features of common cysts and tumors through microscopy. 5. Generate differential diagnosis of various jaw cysts and tumors. 6. Relate and apply knowledge in clinical practice.	Interactive Lecture Histopathological slide study SGD	MCQs SEQs OSPE Viva
2	Developmenta l Disorders	1. Define and classify bone lesions. 2. Define fibro-osseous lesions. 3. Compare and distinguish between	Interactive Lecture Histopathological slide study	MCQs SEQs OSPE Viva

		various fibro-osseous lesions. 4. Generate differential diagnosis on clinical and radiographical grounds. 5. To be able to apply their knowledge on patient diagnosis.		
3	Metabolic Disorders	1. Define and enlist metabolic bone disorders. 2. Briefly distinguish among various metabolic bone disorders clinically, radiographically and histopathologically. 3. Discuss the oral manifestations of these disorders.	Interactive Lecture	MCQs SEQs OSPE Viva
4	Inflammatory Disorders	1. Define and classify osteomyelitis. 2. Explain in detail the etiology and pathogenesis. 3. Discuss the clinical, radiographical and histopathological features in relation to clinical practice.	Interactive Lecture Histopathological slide study	MCQs SEQs OSPE Viva
5	Neoplastic Disorders	1.Define and classify neoplastic bone lesions. 2. Discuss and distinguish between common benign and malignant neoplasms clinically, radiographically and histopathologically, that includes osteomas, osteoblastoma, osteosarcoma and chondrosarcoma. 3. Generate differential diagnosis based on clinical and radiographical grounds.	Interactive Lecture Histopathological slide study	MCQs SEQs OSPE Viva

		4. Relate this knowledge in clinical practice.		



BLOCK lV -SALIVARY GLAND PATHOLOGY

Sr.	Topic	Learning Objectives	Instructional strategies	Assessment Tools
1	Inflammatory Disorders	1. Define and enlist different types of sialadenitis. 2. Discuss the causative agents along with differential diagnosis of acute/chronic sialadenitis based on clinical grounds.	Interactive Lecture	MCQs SEQs OSPE Viva

2	Immunological Disorders	1. Define and classify Sjogren's syndrome. 2. Discuss the pathogenesis and clinical presentation in detail. 3. Evaluate and diagnose based on various lab tests. 4. Apply knowledge in the clinical practice.	Interactive Lecture	MCQs SEQs OSPE Viva
3	Reactive Disorders	1. Enlist and define various reactive lesions such as mucocele, sialolithiasis, sialadenitis, sialorrhea and necrotizing sialometaplasia. 2. Identify the underlying causative agent along with the characteristic clinical presentation of these conditions. 3. Diagnose such lesions in clinical practice.	Interactive Lecture Histopathological slide study	MCQs SEQs OSPE Viva
4	Neoplastic Disorders	1. Classify salivary gland neoplasms. 2. Differentiate between benign and malignant salivary gland tumor on clinical grounds. 3. Explain in detail the clinical and histological features of common benign tumor like pleomorphic	Interactive Lecture Histopathological slide study	MCQs SEQs OSPE Viva

		adenoma and warthin's tumor. 4. Discuss in detail the clinical and histological features of common malignant tumor like mucoepidermoid carcinoma, ca ex-pleomorphic adenoma and adenoid cystic carcinoma. 5. Generate differential diagnosis of various salivary gland pathologies with application in the clinical setting.		

Feedback on Oral presentation

2. LECTURER FEEDBACK ON ORAL PRESENTATIONS

Presentation Grading Criteria

Student name.....Title.....

	EXCELLENT (70-100)	GOOD (60-70)	SATISFACTORY (50-60)	BELOW AVERAGE (40-50)	FAIL (0-39)
Delivery • Clear and audible • Appropriate timing • Engaged with audience					
Knowledge and content • Confident with subject/material • Evidence of research • Able to explain key ideas/issues					
Structure • Logically organised • Clear argument with relevant points • Appropriate training					
Analysis and evaluation • Balanced evaluation of information/evidence • Detailed analysis of material used					
Use of visual aids • All relevant to content • Clear and legible • Used appropriately					
Response to questions • Prepared for questions • Handled questions knowledgeably					
Team work • Coherent group presentation • Individual work well-integrated into whole					