

**College of Dentistry, Lahore Medical & Dental College**

**Study Guide**

**Oral Pathology**

**3rd YEAR BDS 2023**

**Oral Pathology Curriculum (2023)**



**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) Associate Professor

Dr. Rummana Aqeel B.D.S, M.Phil Assistant Professor

**Co contributors**:

Dr.Aiza Mahmood B.D.S Demonstrator

Dr. Javeria Iftakhar B.D.S Demonstrator

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***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
* Lectures
* Lab practical
* Tutorial
* Small group discussions
* Self study
* Assignment

1. Class presentation
2. Poster presentation
3. 3D Models

* Hands - on

Course Duration: 200 hrs

* Lectures – 70
* Practical – 30
* Self Directed Learning – 30

Ratio – 50:35:15

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

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

**Affective Domain**: Portfolio

PMC Guidelines for Oral Pathology Course

**Facilitators:**

Professor

Associate Professor

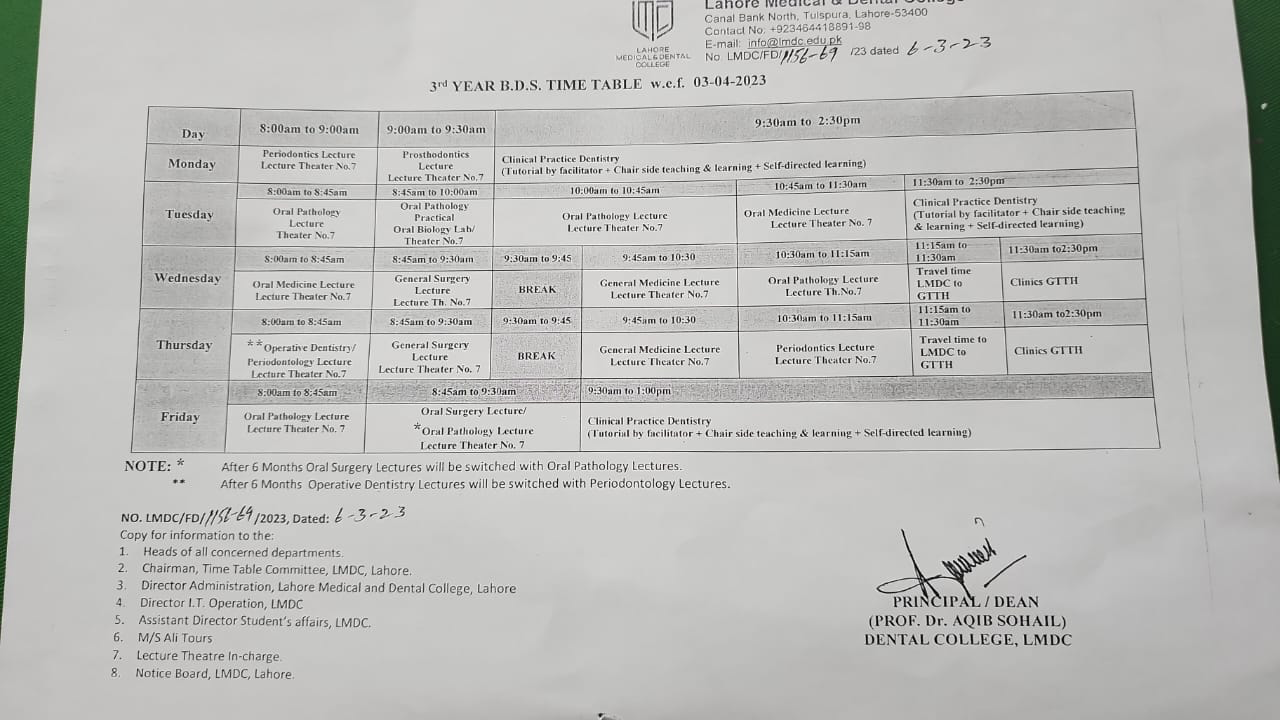
Assistant Professor

Demonstrators

**Supporting staff:**

Lab Technician

**TIME TABLE 3rd YEAR BDS**



**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 | 110 |
|
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|
|
| Practicals/ Tutorial | 36 |
| 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 INTERNAL ASSESSMENT = 20 Marks**

**EXAMINATION = 90 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 )**

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

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| --- | --- | --- | --- |
| **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 |

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| **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 |

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| **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 |

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| **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 |

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| **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 |

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| **Lecture no.** | **Topic ( Chapter)** | **Sub topic** | **Facilitator** |
| 1 | **Immune Mediated** | Introduction | **Dr Momin Ayub** |
| 2 | RECURRENT APHTHOUS STOMATITIS  Associated Systemic Conditions Aphthous Minor  Aphthous Major |
| 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 |

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| **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 |

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| **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 |

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| **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 |

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| **Lecture No.** | **Topic** | **Sub-Topic** | **Facilitator** |
| 1 | **Infections Of Teeth and Bone**  **Infections of Teeth and Bone** | **DENTAL CARIES**  Theories | **Dr. Rummana Aqeel**  **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 | **DENTAL CARIES**  Enamel caries |
| 6 | **DENTAL CARIES**  Dentinal caries |
| 7 | **PULPITIS**  Reversible pulpitis  Irreversible pulpitis |
| 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** |

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| **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 |

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| **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 |

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

**3rd yr BDS**

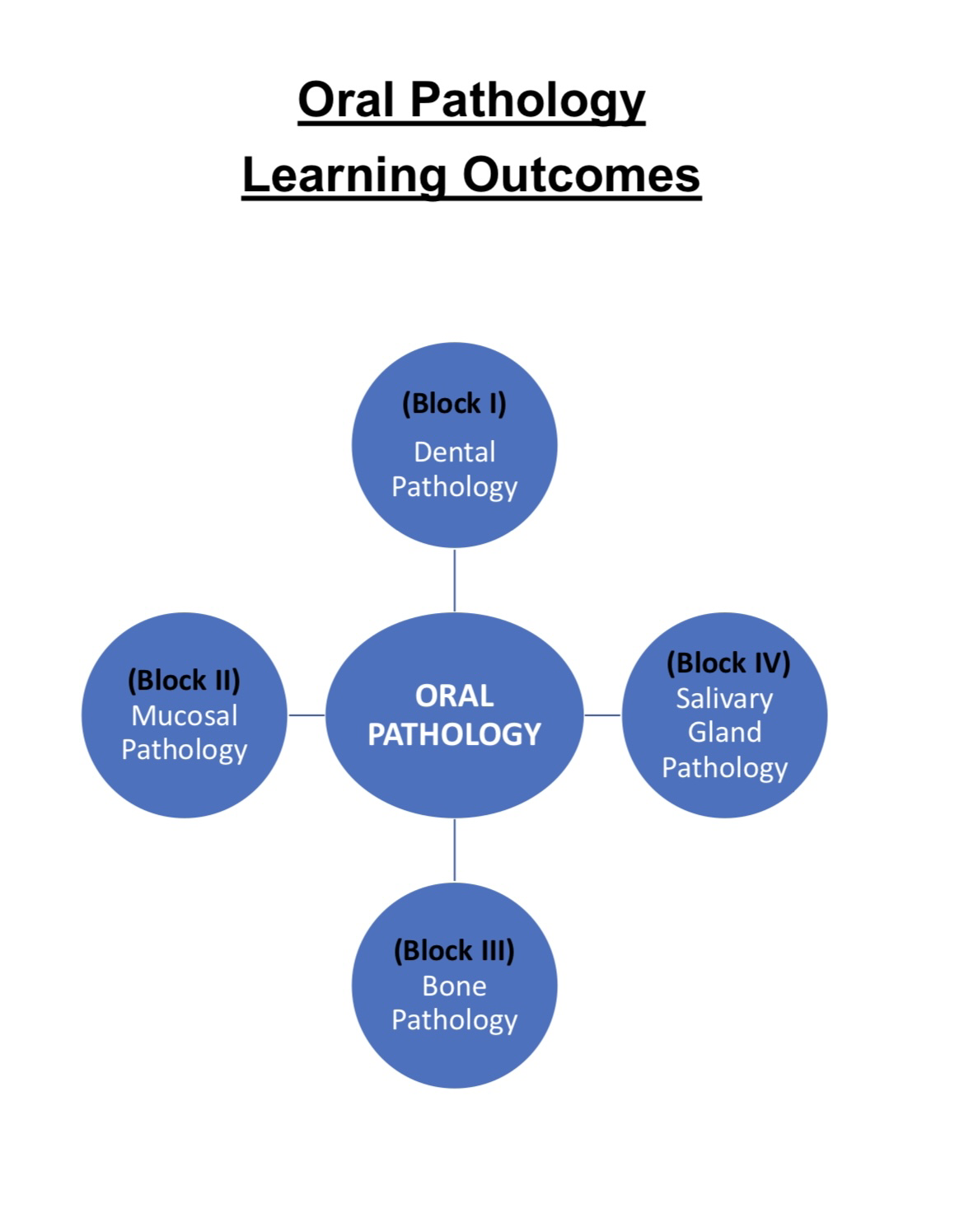
**LECTURE ALLOCATION 2023**

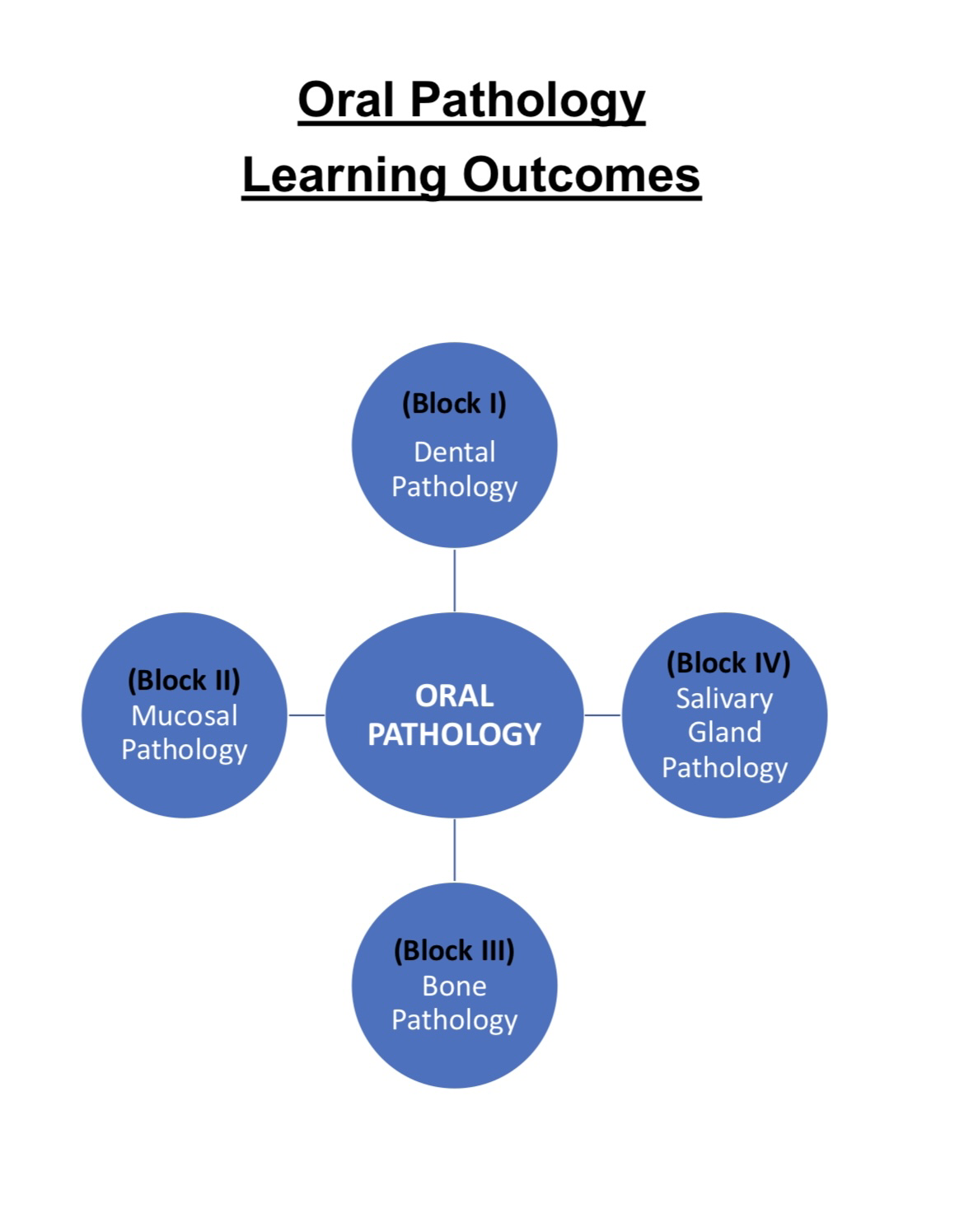
**Total # of lectures in 36 weeks: = 95**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Nov-Dec** | **Jan** | **Feb** | **March** | **April** | **May** | **June** | **July** | **August** | **TOTAL** |
| **Introduction to Oral Pathology** | **1** |  |  |  |  |  |  |  |  | **1** |
| **Infections of Teeth and Bone** | **4** | **4** |  |  |  |  |  |  |  | **8** |
| **Oral Infections** |  | **8** |  |  |  |  |  |  |  | **8** |
| **Salivary Gland Disorders** |  |  | **8** |  |  |  |  |  |  | **8** |
| **Wound Healing** |  |  |  | **1** |  |  |  |  |  | **1** |
| **Immune-Mediated Disorders** |  |  |  | **8** |  |  |  |  |  | **8** |
| **Epithelial Disorders** |  |  |  |  | **10** |  |  |  |  | **10** |
| **Diseases of Blood** |  |  |  |  |  | **3** |  |  |  | **3** |
| **Development Disturbances of the Oral Regions** |  |  |  |  |  |  | **8** |  |  | **8** |
| **Connective Tissue Disorders** |  |  |  |  |  |  |  | **8** |  | **8** |
| **Cysts of the Oral Regions** |  |  |  |  |  |  |  |  | **8** | **8** |
| **Physical and Chemical Injuries** |  |  |  |  |  |  |  |  | **8** | **8** |
| **Bone Lesions** |  |  | **8** |  |  |  |  |  |  | **8** |
| **Odontogenic Tumors** |  |  |  |  |  | **8** |  |  |  | **8** |
| **TOTAL** | **5** | **12** | **16** | **9** | **10** | **11** | **8** | **8** | **16** | **95** |

**TIMELIINE ORAL PATHOLOGY TOPICS 2023**

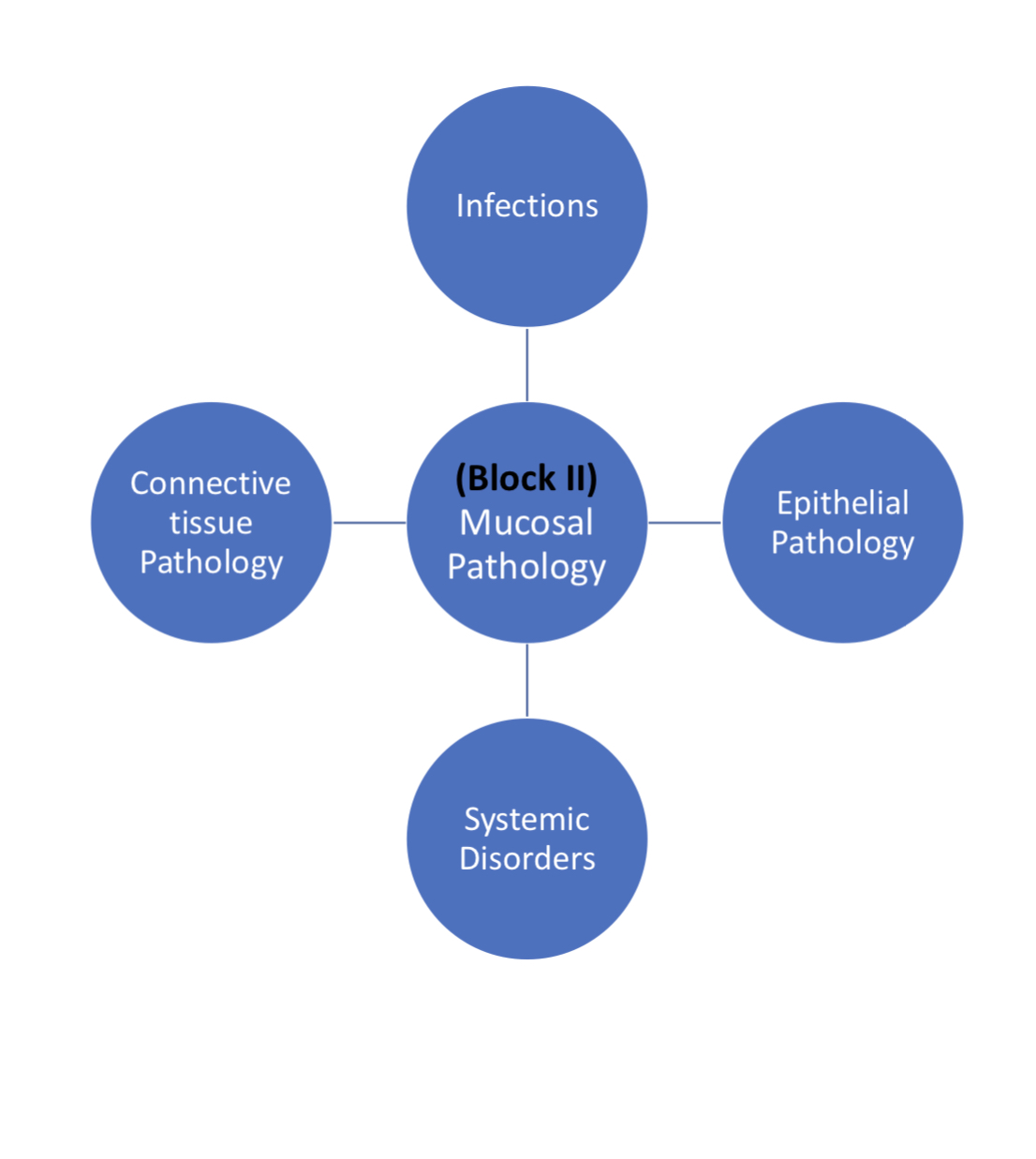
|  |  |  |
| --- | --- | --- |
| 1 | April | * Introduction to Oral Pathology * Infections of Teeth and Bone * Developmental Disturbances of Oral Regions |
| 2 | May | * Developmental Disturbances of Oral Regions * Immune Mediated Disorders |
| 3 | June | * Immune Mediated Disorders |
| 4 | July | * Salivary Gland Disorders * **Mid Term Assessment** * Bone Lesions |
| 5 | August | * Bone Lesions * Epithelial Disorders |
| 6 | September | * Connective Tissue Disorders |
| 7 | October | * Connective Tissue Disorders * Odontogenic Cyst |
| 8 | November | * Diseases of Blood |
| 9 | December | * Odontogenic tumors |
| 10 | January | * Physical and Chemical Injuries * Wound Healing * **Send-Up assessment** |
| 11 | February/March | Prep leave for Professional Exam |

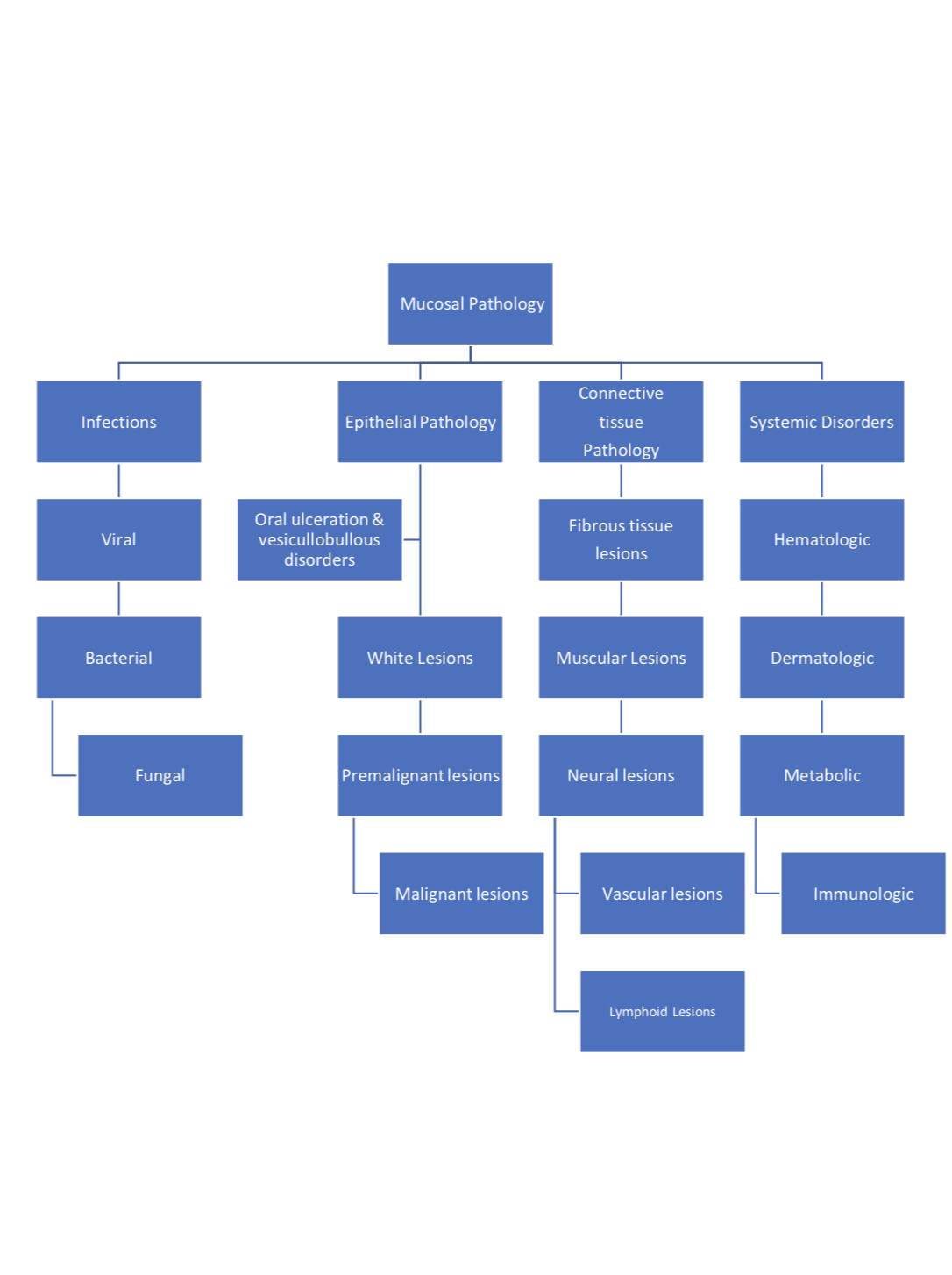
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**BLOCK I - DENTAL PATHOLOGY**

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| **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 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. | Interactive lecture | MCQs  SEQs  OSPE  Viva |
| 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. |  |  |

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**BlOCK II (MUCOSAL PATHOLOGY)**

**Sub-Category: Infections**

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| --- | --- | --- | --- | --- |
| **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 for Actinomycosis and Tuberculosis. | Interactive Lecture | MCQs  SEQs  OSPE  Viva |
| 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**

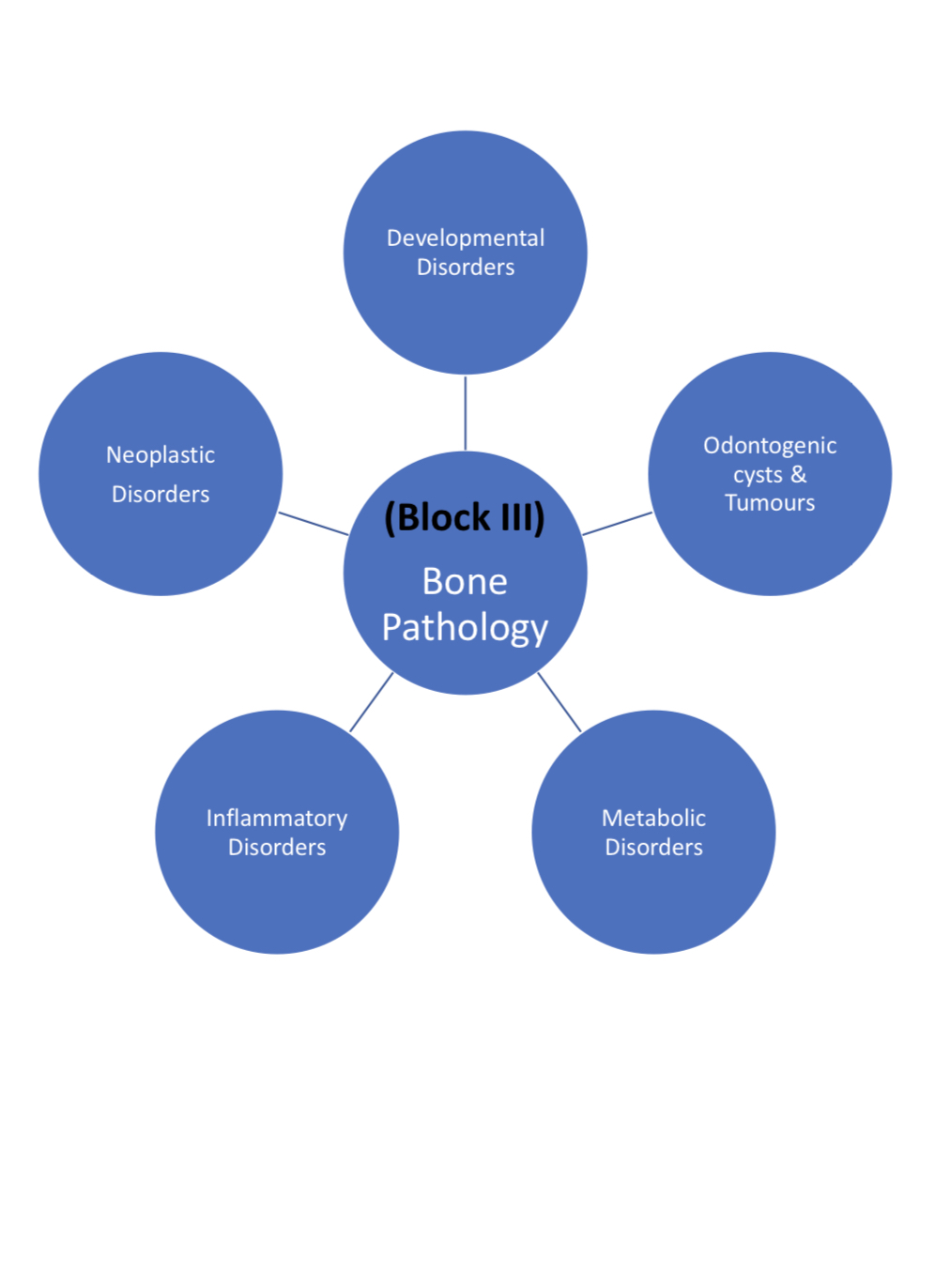
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| --- | --- | --- | --- | --- |
| **Sr.** | **Topic** | **Learning Objectives** | **Instructional strategies** | **Assessment Tools** |
| 1 | White Lesions | 1. Define and classify white lesions of oral cavity with brief description of histological 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 and histological features of Dysplasia in detail.  5. Generate the differential diagnosis of various white lesions.  6. Relate this knowledge in clinical practice. | Interactive Lecture  Histopathological slide study | MCQs  SEQs  OSPE  Viva |
| 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 clinical presentation of benign and malignant melanocytic lesions.  8. Interpretation of these concepts in clinical practice. | Interactive Lecture  Histopathological slide study  SDG | MCQs  SEQs  OSPE  Viva |

**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 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. | Interactive Lecture | MCQs  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 |

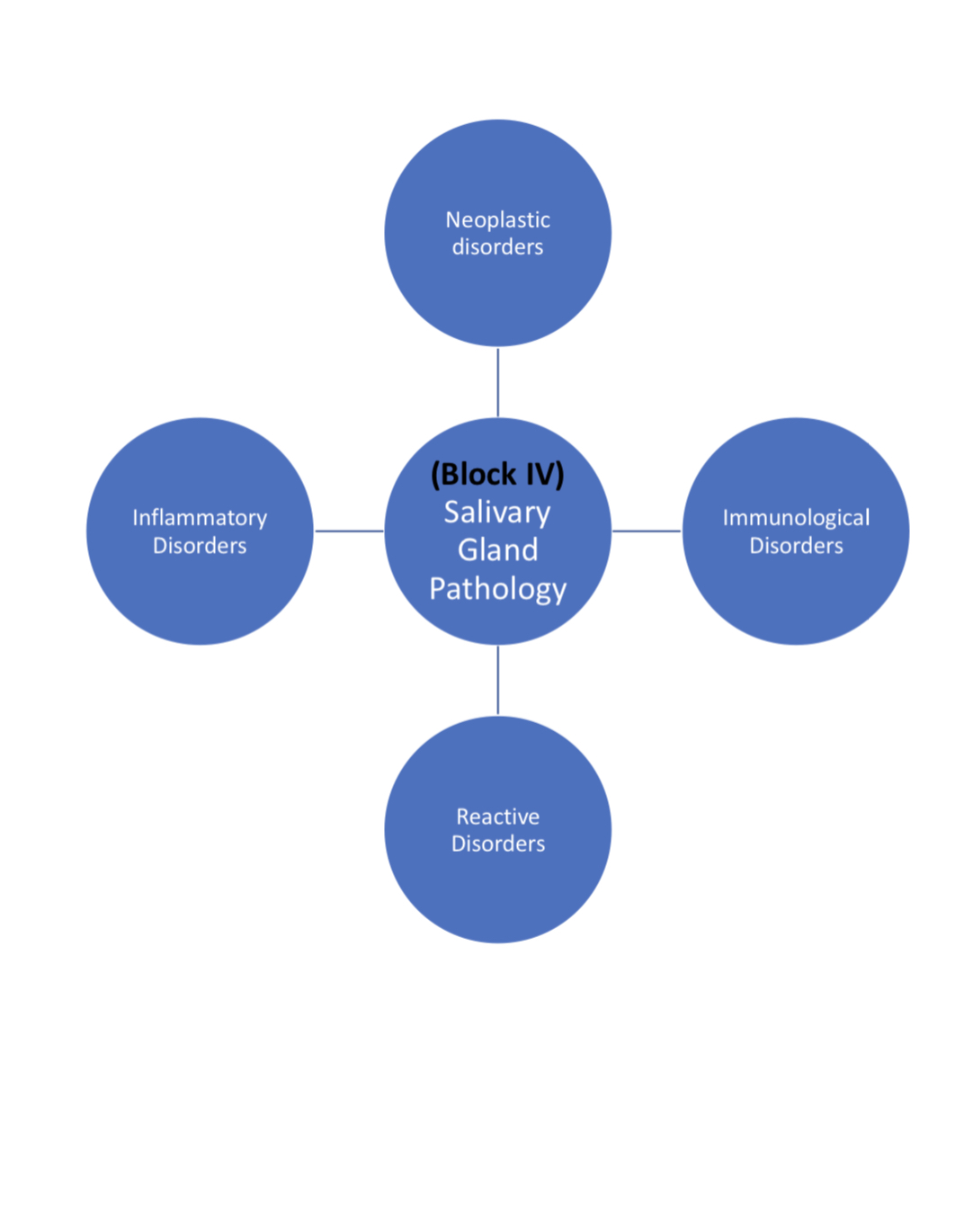
**Sub-category: Systemic Pathology**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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 |

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**BLOCK III - BONE PATHOLOGY**

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| --- | --- | --- | --- | --- |
| **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 various fibro-osseous lesions.  4. Generate differential  diagnosis on clinical and radiographical grounds.  5. To be able to apply their knowledge on patient diagnosis. | Interactive Lecture  Histopathological slide study | MCQs  SEQs  OSPE  Viva |
| 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.  4. Relate this knowledge in  clinical practice. | Interactive Lecture  Histopathological slide study | MCQs  SEQs  OSPE  Viva |

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**BLOCK lV -SALIVARY GLAND PATHOLOGY**

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| --- | --- | --- | --- | --- |
| **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 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. | Interactive Lecture  Histopathological slide study | MCQs  SEQs  OSPE  Viva |

**Feedback on Oral presentation**

