

Department of Oral Pathology



**Study Guide
3rd Year BDS**

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



PREFACE

Study guides can make a major contribution to learning. They are sometimes likened to a tutor sitting on the student's shoulder-available 24 hours a day to advise the student what he/she should be doing at any stage in their study. Study guides are different from textbooks. They apprise the student at the beginning of an academic session about the course outline, the teaching methodology to be followed throughout the year, learning objectives of each academic activity and the assessment methodology to be followed in an academic session.

At SMDC we follow the traditional annual academic schedule in which the subject of Oral Pathology is taught in the third academic year of a dental student. Keeping in view the mission of UHS, Lahore and vision of our institute we have designed a training program which is intensive and at the same time interesting for the young minds. This guide includes details about various teaching activities which are to take place throughout the academic year along with the time allocation of each. A list of lectures to be conducted in this session with names of the instructors is attached. Broad learning outcomes of every section of the course accompanied by specific learning objective of every lecture is also included. A complete list of practical work to be carried out in the laboratory is part of this document. Details of various assessments and testing methodology are included and marks distribution for the subject in the 3rd Professional examinations has been given. Names and email contacts of faculty have also been mentioned to foster better interaction between the teacher and the taught. A list of prescribed text and reference books forms part of this study guide. Since this document is the first of its kind, we intend to improve upon it in light of the student-feedback every year.

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VISION & MISSION OF UHS

Qualitative and Quantitative Revolution in Medical Education and Research through Evolution and there by improve Health Care delivery to Populace.

UHS shall be innovative global center of excellence in learning and research, supporting a community of scholars and professionals committed to serving society, promoting the development of students to reach their true potential in becoming competent, ethical, caring, and inquiring health professionals for the benefit of the country and the wider world.

MISSION OF SMDC

Sharif Medical & Dental College is dedicated to best serve the nation through preservation and dissemination of advanced knowledge and educating the students by latest trends in learning and research reaching levels pars excellence.

The Institution is committed to provide standardized quality medical education to its students by inculcating professional knowledge, skills and responsibilities in them with the aim of:

- Preparing them as modern physicians having initiative to act as future leaders in their respective fields and becoming lifelong learners.
- Encouraging the spirit of critical thinking through research and publication.
- Building up an understanding of the ethical values compatible with our religion, culture and social norms.
- Developing a sense of being responsible citizens of the society possessing professional competence and instilling in them the values of hard work and dedication thus preparing them to be accountable to the stakeholders and the state.

The Institution is devoted to keep abreast its faculty with the latest trends in Medical Education encompassing teaching/learning methodologies, assessment tools, research opportunities and professionalism to facilitate their professional development, competencies and commitment towards continues learning.

Our patient-centered mission is achieved by outstanding medical care & services in professional practice with due emphasis and focus on our local health needs.

Our mission further elaborate upon establishing academic and research facilities in areas of local demand under global gold standards and leading advancement in research, education & patient care.

VISION OF SMDC

To be recognized for the provision of a safe and functional environment conducive to collaborative teaching & learning, comfortable working atmosphere, and conducting world class research through professionalism and excellence.



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PLANNED TEACHING ACTIVITIES

PMC has allocated 150 hours of teaching in the subject of Oral Pathology for the BDS course. To meet this requirement following teaching modules have been planned. These modules have been carefully designed to impart core knowledge of Oral Pathology in a manner that an undergraduate student can grasp the subject fully and is adequately prepared for university examinations.

Lectures:

The lectures will be conducted by the Professor and lecturers. The lectures will be interactive, and students should actively participate in them to clear their doubts. The students are required to take notes of the lectures and study the topic with the help of prescribed textbooks in light of the learning objectives of the topic enunciated by the teacher at the beginning of each lecture.

Practical classes:

One practical class has been planned per week. It will comprise of Oral Pathology practicals. The class will be divided into 02 batches to conduct the practicals effectively and one batch will be entertained once a week for these sessions. Practical will be conducted by demonstrators under an active supervision of senior instructors. Students are required to enter their work in their practical notebooks and get them checked by the instructors regularly.

Tutorials:

One tutorial class per week is proposed throughout the academic session. The class will be divided into 02 batches. Topics for the tutorial will be notified at least one week before the class. One instructor will be deputed for every batch on rotation basis. A pre-tutorial quiz or test will be held before tutorial discussion so that the students come prepared for the topic. During this interactive session the students must clear their concepts regarding the topic by actively engaging with their respective teachers.

Small group discussion:

Smaller groups comprising of 10 students each will be made, and an instructor will be allocated. Discussion regarding various topics will be carried out and group exercises will be performed.

Self-directed learning:

A specific time will be assigned each week to self-directed learning. The students will be free to stay in the class or go to the library or laboratory to study on their own.

TRAINING PROGRAM FOR LECTURES

GENERAL

Oral Pathology should be considered as a bridge between the basic and clinical dental subjects. The teaching of this subject should encompass both the basic and the applied aspects.

- Teaching of Oral Pathology should be integrated with other subjects that are General Pathology, Microbiology, and clinical disciplines wherever possible.
- Interactive modes of teaching that is tutorials, seminars, and case –based learning modules etc. should be an essential part of teaching methodology.

Sr. No.	Title of lecture	Instructor
Disturbances in Size, Shape, Number and Eruption		
1	Disturbances in size of teeth	Dr. Hira Butt
	Microdontia	
	Macrodontia	
	Disturbances in Number	
	Total and Partial Anodontia	
	Supernumerary Teeth	
2	Disturbances in Eruption	Dr. Hira Butt
	Premature Eruption	
	Delayed Eruption	
	Impacted Teeth	
3	Disturbances in Shape	Dr. Hira Butt
	Dilaceration	
	Taurodontism	
CHAPTER 1: DEVELOPMENTAL DISTURBANCES OF THE ORAL REGION		
4	Dens Invaginatus	Dr. Hira Butt
	Supernumerary Cusps	
	Supernumerary Roots	
	Gemination	
	Fusion	
	Concrescence	
	Hypercementosis	
	Cervical Enamel Projection	
DISTURBANCE IN ENAMEL, DENTIN AND CEMENTUM		
5	Disturbances in Structure of Enamel	Dr. Hira Butt
	Acquired Disturbances	
	Amelogenesis Imperfecta	
	Disturbances in Structure of Dentin	
	Dentinogenesis Imperfecta	
	Dentin Dysplasia	
	Regional Odontodysplasia	
	Disturbances in Structure of Cementum	
	Hypophosphatasia	

DISTUBANCE IN SOFT TISSUE		
6	SOFT TISSUE	Dr. Hira Butt
	Congenital Lip Pits	
	Double Lip	
	Frenal Tag	
	Ankyloglossia	
	Macroglossia	
	Fordyce Granules	
	Leukoedema	
	White Sponge Nevus	
	Lingual Thyroid Nodule	
	Oral Tonsil	
Retrocuspid Papilla		
DISTUBANCES IN BONE		
7	Hemifacial Hypertrophy	Dr. Hira Butt
	Hemifacial Atrophy	
	Cleft Lip and Cleft Palate	
	Lingual Mandibular Salivary Gland	
	Depression	
	Focal Osteoporotic Bone Marrow Defect	
SYNDROMES		
8	Cleidocranial Dysplasia	Dr. Hira Butt
	Crouzon Syndrome (Craniofacial Dysostosis)	
	Treacher Collins Syndrome (Mandibulofacial Dysostosis)	
	Down Syndrome (Trisomy 21)	
	Papillon-Lefevre Syndrome & Oral-Facial-Digital Syndrome, Type I	

Sr. No.	Title of lecture	Instructor
1	ODONTOGENIC CYSTS	Prof. Dr. Nauman Rauf Khan
	Cysts Derived from Rests of Malassez	
	Periapical Cyst	
	Cysts Derived from Reduced Enamel Epithelium	
2	Dentigerous Cyst	Prof. Dr. Nauman Rauf Khan
	Eruption Cyst	
	Paradental Cyst	
	Cysts Derived from Dental Lamina (Rests of Serres)	
3	Odontogenic Keratocyst	Prof. Dr. Nauman Rauf Khan
	Lateral Periodontal Cyst	
	Gingival Cyst of Adult	
	Dental Lamina Cyst of Newborn	
	Glandular Odontogenic Cyst (Sialo-Odontogenic Cyst)	



CHAPTER 2: CYSTS OF THE ORAL REGION

Sr. No.	Title of lecture	Instructor
4	DEVELOPMENTAL CYSTS OF ORAL REGION	Prof. Dr. Nauman R Khan
	Cysts of Vestigial Ducts	
	Nasopalatine Duct Cyst	
	Nasolabial Cyst	
5	Lymphoepithelial Cysts	Prof. Dr. Nauman Rauf Khan
	Oral Lymphoepithelial Cyst	
	Cervical Lymphoepithelial Cyst	
	Cyst of Vestigial Tract	
	Thyroglossal Tract Cyst	
	Cysts of Embryonic Skin	
	Dermoid Cyst	
	Epidermoid Cyst	
	Cysts of Mucosal Epithelium	
	Surgical Ciliated Cyst of Maxilla	
Heterotopic Oral Gastrointestinal Cyst		

CHAPTER 3: INFECTIONS OF TEETH AND BONE

Sr. No.	Title of lecture	Instructor
1	DENTAL CARIES	Dr. Fatima Mirza
	Epidemiology	
	Clinical Types	
	Enamel Caries	
2	Dentin Caries	Dr. Fatima Mirza
	PULPITIS	
	Reversible Pulpitis	
	Irreversible Pulpitis	
3	Pulpal Necrosis	Dr. Fatima Mirza
	COMMON DIAGNOSTIC TECHNIQUES	
	History and Nature of Pain	
	Reaction to Thermal Changes	
	Reaction to Electrical Stimulation	
	Reaction to Tooth Percussion	
	Radiographic Examination	
Visual Clinical Examination		
4	Palpation of Surrounding Area	Dr. Fatima Mirza
	HISTOPATHOLOGY OF PULPAL DISEASE	
	Acute Pulpitis	
	Chronic Pulpitis	
5	Chronic Hyperplastic Pulpitis	Dr. Fatima Mirza
	PERIAPICAL LESIONS	
	Chronic Apical Periodontitis	
	Periapical Granuloma	
	Periapical Cyst	

6	ACUTE PERIAPICAL CONDITION	Dr. Fatima Mirza
	Periapical Abscess	
7	OSTEOMYELITIS	Dr. Fatima Mirza

CHAPTER 4: BONE LESIONS

Sr. No.	Title of lecture	Instructor
1	BENIGN FIBRO-OSSEOUS LESIONS	Prof. Dr. Nauman Rauf Khan
	Cemento-Osseous Lesions	
	Periapical Cemental Dysplasia	
	Florid Cemento-Osseous Dysplasia	
2	Fibrous Dysplasia	Prof. Dr. Nauman Rauf Khan
	Juvenile Fibrous Dysplasia	
	Adult Monostotic Fibrous Dysplasia	
	Polyostotic Fibrous Dysplasia	
	Cherubism	
	Acute Osteomyelitis	
	Cellulitis	
	Chronic Osteomyelitis	
Garré Osteomyelitis		
3	METABOLIC CONDITIONS	Prof. Dr. Nauman Rauf Khan
	Paget Disease	
	Hyperparathyroidism	
	Osteopetrosis	
	Osteogenesis Imperfecta	
4	BENIGN TUMORS	Prof. Dr. Nauman Rauf Khan
	Torus, Exostosis, and Osteoma	
	Torus Palatinus	
	Torus Mandibularis	
	Exostosis	
	Osteoma	
	Osteoid Osteoma and Osteoblastoma	
	Cemento-Ossifying Fibroma	
	Giant Cell Lesions	
	Peripheral Giant Cell Granuloma	
	Central Giant Cell Lesion	
	Aneurysmal Bone Cyst	
	Traumatic Bone Cyst	
	Langerhans Cell Histiocytosis	
5	MALIGNANT TUMORS	Prof. Dr. Nauman Rauf Khan
	Osteogenic Sarcoma, Chondrosarcoma & Ewing Sarcoma	

CHAPTER 5: ODONTOGENIC TUMORS

Sr. No.	Title of lecture	Instructor
1	EPITHELIAL ODONTOGENIC TUMORS	Prof. Dr. Nauman Rauf Khan
	Ameloblastoma	
	Common Ameloblastoma	
	Unicystic Ameloblastoma	
2	Peripheral Ameloblastoma	Prof. Dr. Nauman Rauf Khan
	Calcifying Epithelial Odontogenic Tumor	
	Adenomatoid Odontogenic Tumor	
	Calcifying Odontogenic Cyst	
3	Squamous Odontogenic Tumor	Prof. Dr. Nauman Rauf Khan
	CONNECTIVE TISSUE ODONTOGENIC TUMORS	
	Odontogenic Fibroma	
	Peripheral Odontogenic Fibroma	
	Central Odontogenic Fibroma	
4	Odontogenic Myxoma	Prof. Dr. Nauman Rauf Khan
	Cementoblastoma	
	MIXED ODONTOGENIC TUMORS	
	Ameloblastic Fibroma	
5	Odontoma	Prof. Dr. Nauman Rauf Khan
	Ameloblastic Fibro-Odontoma	
	MALIGNANT ODONTOGENIC TUMORS	
	Malignant Ameloblastoma	
	Ameloblastic Carcinoma	
5	Odontogenic Carcinoma	Prof. Dr. Nauman Rauf Khan
	Primary Intraosseous Carcinoma	

CHAPTER 6: EPITHELIAL DISORDERS

Sr. No.	Title of lecture	Instructor
1	BENIGN EPITHELIAL LESIONS	Prof. Dr. Nauman Rauf Khan
	Squamous Papilloma	
	Keratoacanthoma	
2	BENIGN PIGMENTED LESIONS	Prof. Dr. Nauman Rauf Khan
	Melanotic Macules	
	Smoker's Melanosis	
	Nevi	
	Intramucosal (Intradermal) Nevus	
	Junctional Nevus	
	Compound Nevus	
	Blue Nevus	
	Spitz Nevus	
	Seborrheic Keratosis	
	Actinic Lentigo	
	Peutz-Jeghers Syndrome	
	Melasma	
	Acanthosis Nigricans	

3	LEUKOPLAKIA, EPITHELIAL HYPERPLASIA, EPITHELIAL ATROPHY AND EPITHELIAL DYSPLASIA	Prof. Dr. Nauman Rauf Khan
	EPITHELIAL HYPERPLASIA	Prof. Dr. Nauman Rauf Khan
	Hyperkeratosis	
	Acanthosis	
	Nicotine Stomatitis	
	Proliferative Verrucous Leukoplakia	
4	EPITHELIAL ATROPHY	Prof. Dr. Nauman Rauf Khan
	Oral Submucous Fibrosis	
	EPITHELIAL DYSPLASIA	
	Carcinoma In Situ	
	Erythroplakia	
5	MALIGNANT EPITHELIAL NEOPLASMS	Prof. Dr. Nauman Rauf Khan
	Squamous Cell Carcinoma	
	Carcinogenic Factors	
	Sites and Incidence	
	Metastasis	
	Less Common Forms of Squamous Cell	
	Carcinoma	
6	MELANOMA	Prof. Dr. Nauman Rauf Khan
	Skin and Mucosal Melanoma	
	Superficial Spreading Melanoma	Prof. Dr. Nauman Rauf Khan
	Lentigo Maligna Melanoma	
	Acral Lentiginous Melanoma	
	Nodular Melanoma	
7	METASTASES TO THE JAWS	Prof. Dr. Nauman Rauf Khan

CHAPTER 7: ORAL INFECTIONS

Sr. No.	Title of lecture	Instructor
1	VIRAL INFECTIONS	Dr. Hira Butt
	Herpes Viruses	
	Herpes Simplex Virus	
	Varicella-Zoster Virus	
2	Epstein-Barr Virus	Dr. Hira Butt
	Cytomegalovirus	
	Human Herpesvirus 6, 7, and 8	
	Coxsackie Viruses	
	Herpangina	
	Hand, Foot, and Mouth Disease	
	Acute Lymphonodular Pharyngitis	
	Togavirus	
	Rubella	
	Paramyxoviruses	
	Measles	
	Mumps (Epidemic Parotitis)	

2	Human Papilloma Viruses	Dr. Hira Butt
	Squamous Papilloma	
	Verruca Vulgaris	
	Condyloma Acuminatum	
	Focal Epithelial Hyperplasia	
	Retroviruses	
	Human Immunodeficiency Virus	
3	BACTERIAL INFECTIONS	Dr. Hira Butt
	<i>Streptococcus</i>	
	Pharyngitis and Tonsillitis	
	Scarlet Fever	
	Impetigo	
	<i>Staphylococcus</i>	
	Osteomyelitis	
	Mycobacterium Tuberculosis	
	Treponema Pallidum	
	Syphilis	
	Actinomyces	
	Oral-Cervicofacial Actinomycosis	
	4	
Candida Albicans		
Acute Pseudomembranous Candidiasis (Thrush)		
Atrophic (Erythematous) Candidiasis		
Chronic Hyperplastic Candidiasis		
Angular Cheilitis (Perlèche)		
Median Rhomboid Glossitis		
Chronic Mucocutaneous Candidiasis		
Histoplasma Capsulatum		
Histoplasmosis		
Coccidioides Immitis		
Coccidioidomycosis		
Cryptococcus Neofor		
Cryptococcosis		
Blastomyces Dermatitidis		
North American Blastomycosis		
Aspergillus		
Aspergillosis		
Zygomycota Mucor and Rhizopus		
Rhinocerebral Zygomycosis		

CHAPTER 8: IMMUNE MEDIATED DISORDERS

Sr. No.	Title of lecture	Instructor
1	RECURRENT APHTHOUS STOMATITIS	Dr. Hira Butt
	Associated Systemic Conditions	
	Aphthous Minor	
	Aphthous Major	
	Herpetiform Ulcers	
	Behçet Syndrome	
2	MUCOSAL AND SKIN CONDITIONS	Dr. Hira Butt
	Lichen Planus	
	Lichenoid Reactions	
3	Mucous Membrane Pemphigoid	Dr. Hira Butt
	Pemphigus Vulgaris	
4	Epidermolysis Bullosa	Dr. Hira Butt
	Erythema Multiforme	
5	Lupus Erythematosus	Dr. Hira Butt
	Systemic Lupus Erythematosus	
	Subacute Cutaneous Lupus	
	Erythematosus	
	Discoid Lupus Erythematosus	
	Progressive Systemic Sclerosis	
6	ALLERGIC REACTIONS	Dr. Hira Butt
	Contact Stomatitis	
	Angioedema	
7	POSSIBLE IMMUNE-MEDIATED REACTIONS	Dr. Hira Butt
	Cheilitis Glandularis	
	Orofacial Granulomatosis	
8	Oral Crohn Disease	Dr. Hira Butt
	Cheilitis Granulomatosa	
	Melkersson-Rosenthal Syndrome	
9	Chronic Granulomatous Disease	Dr. Hira Butt
	Sarcoidosis	
	Pyostomatitis vegetans	
	Wegner`s granulomatosis	

CHAPTER 9: CONNECTIVE TISSUE LESIONS

Sr. No.	Title of lecture	Instructor
1	FIBROUS TISSUE	Prof. Dr. Nauman Rauf Khan
	Hyperplasias	
	Focal Fibrous Hyperplasia (Irritation Fibroma)	
	Peripheral Ossifying Fibroma	
	Peripheral Giant Cell Granuloma	
	Inflammatory Fibrous Hyperplasia	
	Inflammatory Papillary Hyperplasia	
	Hyperplastic Gingivitis	

	Hereditary Gingival Fibromatosis	
	Drug-Induced Gingival Hyperplasia	
2	Benign Fibrous Neoplasms	Prof. Dr. Nauman Rauf Khan
	Fibromatosis, Myofibromatosis, Myofibroma, and Desmoplastic	
	Fibroma	
	Nodular Fasciitis	
3	Benign Fibrous Histiocytoma	Prof. Dr. Nauman Rauf Khan
	Benign Solitary Fibrous Tumor	
4	Malignant Fibrous Neoplasms	Prof. Dr. Nauman Rauf Khan
	Fibrosarcoma, Malignant Fibrous Histiocytoma, and Malignant Solitary Fibrous Tumor	
5	NEURAL TISSUE	Dr. Hira Butt
	Hyperplasia	
	Traumatic Neuroma	
	Palisaded Encapsulated Neuroma	
	Hamartomas	
6	Multiple Endocrine Neoplasia Syndrome	Dr. Hira Butt
	Benign Neoplasms	
	Neurilemoma	
	Neurofibroma	
7	Granular Cell Tumor	Dr. Hira Butt
	Congenital Gingival Granular Cell Tumor	
	Neuroectodermal Tumor of Infancy	
	Malignant Neoplasm	
	Neurogenic Sarcoma	
8	MUSCLE TISSUE	Dr. Fatima Mirza
	Leiomyoma	
	Rhabdomyosarcoma	
9	ADIPOSE TISSUE	Dr. Fatima Mirza
	Neoplasms	
	Lipoma	
	Liposarcoma	
10	VASCULAR TISSUE	Dr. Fatima Mirza
	Hyperplasia	
	Pyogenic Granuloma	
11	Hamartomas and Neoplasms- Hemangioma	Dr. Fatima Mirza
	Lymphangioma	
	Angiosarcoma	
	Kaposi Sarcoma	
12	OSSEOUS AND CARTILAGE TISSUE	Dr. Fatima Mirza
	Developmental Lesions	
	Soft Tissue Osteoma, Osseous and Cartilaginous Choristoma,	
	Reactive Lesion, Myositis Ossificans	



CHAPTER 10: SALIVARY GLAND DISORDERS

Sr. No.	Title of lecture	Instructor
1	REACTIVE LESIONS	Dr. Fatima Mirza
	Mucocele	
	Mucus Retention Cyst	
	Sialolithiasis	
	Chronic Sclerosing Sialadenitis	
2	Necrotizing Sialometaplasia	Dr. Fatima Mirza
	INFECTIONS	
	Acute Parotitis	
3	Viral Endemic Parotitis (Mumps)	Dr. Fatima Mirza
	Bacterial Sialadenitis	
3	IMMUNE-MEDIATED DISEASES	Dr. Fatima Mirza
	Lymphoepithelial Sialadenitis	
4	Sjögren Syndrome	Dr. Fatima Mirza
	BENIGN SALIVARY GLAND TUMORS	
	Pleomorphic Adenoma	
	Monomorphic Adenoma	
	Papillary Cystadenoma Lymphomatosum	
5	Oncocytoma	Dr. Fatima Mirza
	Other Adenomas	
	MALIGNANT SALIVARY GLAND TUMORS	
	Mucoepidermoid Carcinoma	
	Adenoid Cystic Carcinoma	
	Acinic Cell Carcinoma	
	Polymorphous Low-Grade	
Adenocarcinoma		
Other Adenocarcinomas		

CHAPTER 11: CHEMICAL AND PHYSICAL INJURIES

Sr. No.	Title of lecture	Instructor
1	PHYSICAL INJURIES TEETH	Dr. Fatima Mirza
	Attrition	
	Abrasion	
	Erosion	
	Fracture	
	Avulsion	
	Internal Resorption	
	External Resorption	
	Ankylosis	
	Gingiva	
	Toothbrush Trauma	
	Toothpick Injury	

2	Tongue	Dr. Fatima Mirza
	Traumatic Atrophic Glossitis	
	Benign Migratory Glossitis	
	Hairy Tongue	
	Fissured Tongue	
	Osteoradionecrosis	
	Soft Tissue Radiation Injuries	
	Chronic Ulcers	
	Mucosal Tissue	
	Factitious Injuries	
	Denture Injuries	
	Electrical Burns	
	Thermal Burns	
	Radiation Injuries	
	Radiation Mucositis	
Xerostomia		
Radiation Caries		
4	CHEMICAL INJURIES	Dr. Fatima Mirza
	Teeth	
	Tetracycline	
	Congenital Porphyria	
5	Biliary Atresia	Dr. Fatima Mirza
	Erythroblastosis Fetalis	
	Gingiva	
	Phenytoin	
	Cyclosporine	
	Nifedipine	
	Mucosal Tissue	
	Amalgam	
	Graphite	
	Chemical Burns	
	Acetylsalicylic Acid	
Other Medications		

CHAPTER 12: DISEASES OF THE BLOOD

Sr. No.	Title of lecture	Instructor
1	RED BLOOD CELLS	Dr. Hira Butt
	Anemia	
	Iron Deficiency Anemia	
	Pernicious Anemia	
	Sickle Cell Anemia	
	Thalassemia	
	Fetal Erythroblastosis	

2	WHITE BLOOD CELLS	Dr. Hira Butt
	Leukopenia	
	Agranulocytosis	
	Cyclic Neutropenia	
	Neutrophil Function Disorders	
	Chronic Granulomatous Disease of Childhood	
	Leukocytosis	
	Bacteria-Associated Leukocytosis	
	Virus-Associated Leukocytosis	
Infectious Mononucleosis		
3	WHITE BLOOD CELLS NEOPLASMS	Dr. Hira Butt
	Leukemia	
4	Hodgkin Lymphoma	Dr. Hira Butt
	Non-Hodgkin Lymphoma & MALT Lymphoma	
	Burkitt Lymphoma	
5	Multiple Myeloma	Dr. Hira Butt
	BLEEDING DISORDERS	
	Platelet Disorders	
	Thrombocytopenia	
	Thrombasthenia	
	Capillary Fragility	
	Vitamin C Deficiency (Scurvy)	
	Hereditary Hemorrhagic Telangiectasia	
Coagulation Disorders		
Hemophilia		
Lecture	MISCELLANEOUS	Dr. Fatima Mirza

LIST OF LECTURES AND LEARNING OBJECTIVES

Sr. #	CHAPTER 1: DEVELOPMENTAL DISTURBANCES OF ORAL REGION
1	Developmental disturbances in size, number & shape of teeth By the end of the lecture the student will be able to know: The underlying pathogenesis Clinical features Radiographical features
2	Disturbances in the structure of Enamel, Dentin and Cementum By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Their classifications • Clinical presentations • Histopathological features • Radiographical features • Treatment
3	Developmental disturbances of soft tissues By the end of the lecture the student will be able to know <ul style="list-style-type: none"> • The pathogenesis of these anomalies • Clinical presentations • Histopathological features • Radiographical features
4	Developmental disturbances of bone By the end of the lecture the student will be able to know <ul style="list-style-type: none"> • The causes of these diseases • Radiographic features • Intraoral and extraoral clinical features of these syndromes
Sr. #	CHAPTER 2: ODONOTGENIC CYSTS
1	Odontogenic cysts By the end of the lecture the student will be able to know <ul style="list-style-type: none"> • The underlying pathogenesis • Clinical features • Radiographical features • Histopathological features • Treatment • Classifications
2	Developmental cysts of oral region By the end of the lecture the student will be able to know <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Clinical, Histopathological features • Radiographical feature
Sr. #	CHAPTER 3: INFECTIONS OF BONE AND TEETH
1	Dental Caries By the end of the lecture the student will be able to know <ul style="list-style-type: none"> • The underlying pathogenesis • Clinical features • Radiographic features • Histopathological findings. • Treatment

2	<p>Pulpitis</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Their classification • Clinical presentation • Histopathological features • Radiographic features • Diagnosis • Treatment
3	<p>Common diagnostic technique</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • Various tests • Clinical presentations • Radiographil features • Diagnosis
4	<p>Histopathology of pulpal disease</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • Their classifications • Histopathological features
5	<p>Periapical Lesions and Acute Periapical conditions</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The pathogenesis of these anomalies • Clinical features • Histopathological features • Radiographic features • Treatment
6	<p>Osteomyelitis</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causes of these diseases • Radiographic features • Intraoral and extraoral clinical features • Histopathological features
Sr. #	CHAPTER 4: BONE LESIONS
1	<p>BENIGN FIBRO-OSSEOUS LESION</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The underlying pathogenesis • Clinical features • Radiographical features • Histopathological features • Treatment
2	<p>METABOLIC CONDITIONS</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Their classifications • Clinical presentations • Histopathological features • Radiographical features • Treatment

3	<p>BENIGN TUMORS By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The pathogenesis of these anomalies • Clinical presentations • Histopathological features • Radiographic features
4	<p>MALIGNANT TUMORS By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causes of these diseases • Clinical features • Radiographic features • Histopathological features • Treatment
Sr. #	CHAPTER 5: ODONTOGENIC TUMORS
1	<p>EPITHELIAL ODNTOGENIC TUMORS By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The underlying pathogenesis • Clinical features • Radiographical features • Histopathological features • treatment
2	<p>CONNECTIVE TISSUE ODNTOGENIC TUMORS By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Clinical presentations • Histopathological features • Radiographical features • Treatment
3	<p>MIXED ODNTOGENIC TUMORS By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The pathogenesis of these anomalies • Clinical presentations • Histopathological features • Radiographical features • Treatment
4	<p>MALIGNANT ODNTOGENIC TUMORS By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causes of these diseases • Radiographic features • Clinical presentation • Histopathological features • Treatment
Sr. #	CHAPTER 6 : EPITHELIAL DISORDERS
1	<p>Benign epithelial lesions & benign pigmented lesion By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The underlying pathogenesis • Clinical features • Histopathological features • Treatment

2	<p>Leukoplakia, Epithelial hyperplasia ,Epithelial atrophy ,Epithelial dyplasia</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Clinical presentations • Histopathological features • Treatment
3	<p>Malignant epithelial neoplasms</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causes of these diseases • Histopathological features • Clinical features • Treatment
4	<p>Melanoma and metastasis to the jaw</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causes of these diseases • Histopathological features • Clinical feature • treatment
Sr. #	CHAPTER 7: ORAL INFECTIONS
1	<p>Viral infections</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The underlying pathogenesis • Clinical features • Histopathological features • Treatment
2	<p>Bacterial infections</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Clinical presentations • Histopathological features • Treatment
3	<p>Mycoses</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The pathogenesis of these anomalies • Clinical presentations • Histopathological features • Treatment
Sr. #	CHAPTER 8: IMMUNE MEDIATED DISORDERS
1	<p>Recurrent Aphthous Stomatitis</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The underlying pathogenesis • Clinical features • Histopathological features • Treatment
2	<p>Mucosal and skin condition</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Clinical presentations • Histopathological features

	<ul style="list-style-type: none"> • Radiographical features • Treatment
3	<p>Allergic reactions</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The pathogenesis of these anomalies • Clinical presentations • Histopathological features • Treatment
4	<p>Possible immune mediated reactions</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causes of these diseases • Clinical features • Histopathological findings • Treatment
Sr. #	CHAPTER 9: CONNECTIVE TISSUE LESIONS
1	<p>Fibrous tissue</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The underlying pathogenesis • Clinical features • Histopathological features • Treatment
2	<p>Neural tissue</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Their classifications • Clinical presentations • Histopathological features • Treatment
3	<p>Muscle tissue & Adipose</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The pathogenesis of these anomalies • Clinical presentations • Histopathological features • Treatment
4	<p>Vascular tissue</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The pathogenesis of these anomalies • Clinical presentations • Histopathological features • Treatment
5	<p>Osseous & cartilaginous tissue</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The pathogenesis of these anomalies • Clinical presentations • Histopathological features • Treatment

Sr. #	CHATER 10: SALIVARY GLAND DISORDERS
1	Reactive lesions By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The underlying pathogenesis • Clinical features • Histopathological features • Radiographical features
2	Infections By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Clinical presentations • Histopathological features • Radiographical features
3	Immune mediated diseases By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The pathogenesis of these anomalies • Clinical presentations • Histopathological features • Radiographical features • Treatment
4	Benign salivary gland tumors By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Their classifications • Clinical presentations • Histopathological features • Radiographical features • Treatment
5	Malignant salivary gland tumors By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Their classifications • Clinical presentations • Histopathological features • Radiographical features • Treatment
Sr. #	CHAPTER 11: PHYSICAL AND CHEMICAL INJURIES
1	Physical Injuries (Teeth,gingival,tongue,mucosal tissue and radiation injuries) By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The underlying pathogenesis • Clinical features
2	Chemical Injuries (teeth,gingival,mucosal tissue and chemical burns) By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Clinical presentations • Histopathological features

Sr. #	CHATER 10: SALIVARY GLAND DISORDERS
1	Reactive lesions By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The underlying pathogenesis • Clinical features • Histopathological features • Radiographical features
2	Infections By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Clinical presentations • Histopathological features • Radiographical features
3	Immune mediated diseases By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The pathogenesis of these anomalies • Clinical presentations • Histopathological features • Radiographical features • Treatment
4	Benign salivary gland tumors By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Their classifications • Clinical presentations • Histopathological features • Radiographical features • Treatment
5	Malignant salivary gland tumors By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Their classifications • Clinical presentations • Histopathological features • Radiographical features • Treatment
Sr. #	CHAPTER 12: DISEASES OF BLOOD
1	Red Blood Cells By the end of the lecture the student will be able to know: cultivate basic concepts of : <ul style="list-style-type: none"> • The underlying pathogenesis • Clinical features • Laboratory findings • Treatment
2	White Blood Cells By the end of the lecture the student will be able to know: <ul style="list-style-type: none"> • The pathogenesis • classifications • Clinical presentations

	<ul style="list-style-type: none"> • Laboratory findings • Histopathological features • Radiographical features • Management
3	<p>Bleeding Disorders</p> <p>By the end of the lecture the student will be able to know :</p> <ul style="list-style-type: none"> • The pathogenesis of these anomalies • Clinical presentations • Histopathological features • Laboratory findings • Treatment
Sr. #	MISCELLANEOUS
1	<p>MISCELLANEOUS TOPICS</p> <p>By the end of the lecture the student will be able to know:</p> <ul style="list-style-type: none"> • The causative factors and pathogenesis of these anomalies • Their classifications • Clinical presentations • Laboratory findings • Histopathological features • Radiographical features

LIST OF PRACTICALS

1. Microscopic slide preparation: To orient the students with basics of slide preparation
2. Steps for operating a microscope: To orient the students with the basics principles and steps of operating a microscope
3. Steps for cheek cell slide preparation: To orient the students with slide preparation, staining and observing it under the microscope
4. Steps for blood glucose measurement:
 - To orient students with the methodology of checking Blood glucose (blood sugar) using a glucometer which can help them performing the test before the treatment of any diabetic patient in clinical practice.
 - To enable students measure their own blood glucose levels and maintain it in a healthy range
 - Steps for blood slide preparation: Blood films are examined in the investigation of hematological (blood) disorders and are routinely employed to look for blood parasites, such as those of malaria and filariasis.
5. Steps of blood group testing: To orient the students with the methodology of blood group testing
6. Steps of blood fractionation using centrifuge: To orient the students with the basics of blood fractionation and obtaining plasma rich protein from it.
7. Detecting fungal infections using potassium hydroxide: To orient the students with the sample retrieval of the infected tissue, preparing a slide, using pot hydroxide and viewing it under a microscope.



ASSESSMENT PLAN

Following modes of assessment are planned for 3rd year BDS class in the subject of Oral Pathology. This plan has been designed keeping in view the university curriculum and hopefully will facilitate the students in preparing for 3rd professional examinations in the subject.

Chapter Tests:

These will be conducted at the completion of every chapter. The test will comprise of MCQs, SEQs and OSPE on the pattern of university examinations. A preparatory time of at least 10 days shall be given prior to these tests. Each test will be followed by viva voce, for which the class will be divided into smaller batches.

OSPE Tests:

In order to prepare the students for practical examinations OSPE tests will be conducted on the pattern of university examinations as part of the class tests.

Term Tests:

Two term tests shall be conducted in coordination with other subjects. This will comprise of theory, practical and viva segments and a sizeable portion of the total course will be included in each of them.

Pre-annual Exam:

This will be undertaken in coordination with other departments, exactly following the format of university professional examinations. It will comprise of MCQs, SEQs, OSPE and Viva voce.

Internal Assessment:

Internal assessment will be calculated out of 20 on the basis of all these class tests conducted all year.



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RECOMMENDED TEXT BOOKS & REFERENCES

Textbooks and reference books

Recommended book

- Sapp, J.P. contemporary Oral & Maxillofacial Pathology, 2nd Edition, Mosby-St. Louis

Reference books

- Regezi, j.a. Oral Pathology: clinical pathologic correlations, 5th Edition. Elsevier-St. Louis
- Neville. Oral and Maxillofacial Pathology, 4th Edition. Saunders-St. Louis
- Cawson, r.a. Cawson's essentials of Oral Pathology and Oral Medicine, 8th Edition. Elsevier- Edinburgh
- Somes, J.V. Oral Pathology, 4th Edition. Oxford- Karachi

Practical copies

1. Oral Pathology practical notebook
2. Oral Pathology Laboratory manual