RAHBAR COLLEGE
OF DENTISTRY

THIRD YEAR
STUDY GUIDE 2026

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MISSION AND VISION OF UHS

Vision Statement:

UHS is a leading university aiming to keep its graduates apt with the ever-emerging global health challenges, evolving educational methodologies and emerging technological advancements to maintain its distinguishable position as a medical university.

Mission Statement:

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 AND VISION OF RCoD

Vision Statement:

To be a leading institution, producing globally competent health professionals through multidisciplinary integrated teaching to advance oral healthcare services and tackle local and global challenges with excellence in education, research, and innovation.

Mission Statement:

To train health professional students in an innovative educational environment, through revolutionary dental education, focusing on state-of-the-art clinical skills, patient care, national community health services, global research and technological advancements, to produce competent caregivers and life-long learners.

INTRODUCTION TO STUDY GUIDE

As you enter the third year of your Bachelor of Dental Surgery (BDS) program, this study guide is designed to help you navigate this crucial stage of your education. It focuses on consolidating your knowledge, enhancing clinical skills, and preparing you for your future career in dentistry.

Objectives of Third Year:

Integration of Knowledge: Reinforce and integrate the knowledge gained in previous year across all disciplines, including anatomy, physiology, biochemistry, and oral biology & tooth morphology.

Preclinical Proficiency: Develop your proficiency in preclinical exercises, including cavity preparation, and prosthetic work on models. This helps you to prepare for clinical application in upcoming years.

Professional Development: Enhance your understanding of the ethical, legal, and professional responsibilities of a dentist. Prepare for the transition from student to practitioner.

Exam Preparation: Equip yourself with effective study strategies and resources to excel in final examinations and assessments.

GENERAL GUIDELINES

All lectures and tutorials will be conducted in one specific room allotted to your year.

Students must follow the disciplinary guidelines laid down by the administration.

Institutional Dress Code must be followed by all students.

All students must wear white overalls in class.

All students are required to wear their issued identity/student cards in class.

The students will be required to maintain their subject logbooks and get them duly signed and checked. Any breach of discipline in the class will not be tolerated.

Mutual respect for both genders is to be strictly observed.

RATIONALE OF CURRICULUM

The rationale for curriculum is to equip future dentists with the knowledge, skills, and attitudes necessary to provide high-quality oral healthcare to patients. Student-centered teaching methodology is employed in the curriculum, to ensure that the graduates are competent, compassionate, and ethical professionals, who can contribute to the overall health and well-being of society.

- **Globally competent graduates:** The dental curriculum ensures teaching students the necessary clinical and interpersonal skills which are at par with the global level, thus ensuring their state-of-the-art expertise with convenient employment opportunities.
- **Student's engagement through integrated teaching**: Students are actively engaged in learning through preclinical sessions, case-based learning, simulations, and clinical exposures, during foundation years. The continuous horizontal and vertical integration allows them to develop their ability to analyze complex information, interpret evidence, and make informed decisions. Spiral curriculum approach enhances the retention of the core principles while learning latest advancements.
- **Patient-centered approach:** Students develop a patient-centered perspective, emphasizing empathy, communication, and collaboration with a team-based learning approach. Graduates are better prepared to provide high-quality patient care due to their strong clinical skills and critical thinking abilities.
- **Real-world experience:** Students gain valuable experience through clinical rotations and simulations, preparing them well, as per the requirements of professional practice. The comprehensive care dentistry clinic provides them with a real-world scenario in a well supervised learning environment, thus ensuring efficient training.
- **Adaptability to changing healthcare landscape through research and innovation:** A student-centered curriculum shall be adapted to address evolving healthcare needs and advancements. Students are encouraged to think creatively and develop innovative solutions to overcome healthcare challenges.
- **Lifelong learning:** A student-centered approach fosters a culture of lifelong learning, essential for healthcare professionals, staying up to date with the latest advancements in

dental science and technology. The drive to conduct research and scientific breakthroughs shall make them leaders in practice.

To achieve these objectives, this dental curriculum includes a combination of classroom instructions, laboratory work, pre-clinical & clinical experience, and research opportunities. The student-centered curriculum provides a robust foundation for developing competent, compassionate, and adaptable healthcare professionals. By empowering students to take ownership of their learning and apply their knowledge to real-world scenarios, this approach equips them well to meet the challenges of an ever-changing healthcare landscape and deliver high-quality patient care.

INTRODUCTION TO CURRICULAR FRAMEWORK

This study guide is developed as a resource material for the students and faculty. The study guide development process included representation from teaching faculty and students. The study guide aims to ensure alignment between societal, institutional, patient, and student needs. The curriculum implemented is a hybrid type of curriculum that has both horizontal and vertical integration via logical sequencing.

The curriculum comprises the following two phases:

PHASE 1 (1 & 2 Year): Includes teaching of basic sciences namely: Anatomy, Physiology, Biochemistry, Oral Biology & Tooth Morphology, Science of Dental Material, Pharmacology, Community & Preventive Dentistry, General Pathology & Microbiology and Behavioral Sciences. It also includes initial training of pre-clinical Prosthodontics, pre-clinical Operative Dentistry, and Research.

PHASE 2 (3rd& Final Year): Includes teaching and training in Periodontology, Oral Pathology, Oral Medicine, General Medicine, General Surgery, Oral and Maxillofacial Surgery, Prosthodontics, Orthodontics, Operative Dentistry, Paediatric Dentistry, Comprehensive Care Dentistry and Research.

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CURRICULUM MAP

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Academic Year	Orientation	Instructional strategies	Learning Outcome	Block 1 Block-1 Exam	Block 2 Block-2 Exam	Block 3 Block-3 Exam	Formative & Summative Assessment	Internal Assessment	Send Up	Professional Examination
Year 1	Orientation Week	• Interactive Lecture • SGDs • CBL/ Assignments • Chairside/ bedside Teaching • Practicals • SDL	**Knowledge** **Skill** **Attitude**	**Examinable Subjects:** Anatomy + Physiology + Oral Biology + Biochemistry + Islamic and PakistanStudies **Non-Examinable Subjects:** None			**Cognitive:** MCQ, SEQ, Viva **Psychomotor:** OSPE, OSCE Practical, Logbook. **Affective:** DOPs, OSCE Viva, Logbook	Block Result + Attendance +Generic Competencies+ Research + Send-up = 10%	MCQs/SEQs/OSPE/OSCE/Viva Voce	CQs/SEQs/OSPE/OSCE/Viva Voce
Year 2				**Examinable Subjects:** Pathology + Pharmacology + Dental Materials + Community Dentistry + Behavioural Sciences **Non-Examinable Subjects:** Pre-Operative + Pre-Prosthodontics						
Year 3				**Examinable Subjects:** General Medicine + General Surgery + Oral Pathology + Oral Medicine **Non-Examinable Subjects:** Operative Dentistry + Prosthodontics + Oral and Maxillofacial Surgery						
Year 4				**Examinable Subjects:** Operative Dentistry + Prosthodontics + Oral and Maxillofacial Surgery + Orthodontics **Non-Examinable Subjects:** None						
Timetable= **Course duration**: 4-year **Timings:** 8 am to 3 pm			Venues: lecture halls, Skill lab, Dental Clinics, Wards, Tutorial room, Conference room Learning Resources: Textbook, Study Models, Case Records, Histology Slides, Dental Material & Instruments							

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RCoD PROGRAM OUTCOMES AND COMPETENCIES

Bachelor of Dental Surgery (BDS) will have the following program outcomes at RCoD:

- The dental graduates will demonstrate the knowledge and skills necessary to practice dentistry in primary care settings to provide comprehensive patient care and make independent decisions for their patients.
- The graduates will promote dental health care within the community, utilizing the latest research, critical thinking and professionalism.
- The graduates will exhibit emotional intelligence, commit to lifelong learning, who can demonstrate leadership and foster innovation.

- RCoD aims to produce a dental graduate to achieve the following competencies, as outlined by PM&DC.

Generic Competencies

1. Professionalism
    - Communication skills
    - Time management
    - Ethics & integrity
    - Teamwork
    - Problem-solving skills
    - Empathy in patient care
2. Critical thinker
3. Creativity - Innovation
4. Leadership
5. Emotional intelligence
6. Life-long learner

Specialty Oriented Competencies (Knowledge, Skill, Attitude)

1. Researcher
2. Emergency patient management
3. Comprehensive care dentistry
4. Implant dentistry

5. Operative dentistry and endodontics
6. Prosthodontics
7. Periodontics
8. Oral and maxillofacial surgery
9. Orthodontics
10. Oral medicine and radiology
11. Paediatric dentistry
12. Pain and anxiety management
13. Health promotion within the community

TEACHING METHODOLOGIES

The learning will be through diverse methods and will include:

1. Large Group Interactive Session (LGIS)
2. Small Group Discussion (SGDs) including Tutorial
3. Case-Base Learning (CBL)
4. Practical
5. Self-Directed learning (SDL)
6. Chairside teaching
7. Reflective Writing

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TEMPORAL ALIGNMENT

Week	Oral Pathology	Oral Medicine	Periodontology	Integration Focus
1-2	Intro to oral diseases, inflammation, repair	Diagnostic techniques, clinical exams	Periodontal anatomy, health vs. disease	Inflammatory responses in all subjects
3-4	Benign/malignant oral lesions	Management of oral lesions	Plaque biofilm, calculus	Lesions affecting periodontium
5-6	Oral cancer, leukoplakia, erythroplakia	Diagnosis and management of lesions	Periodontal disease risk factors	Oral cancer impact on periodontium
7-8	Immune response in oral diseases	Systemic health and oral manifestations	Gingivitis, periodontitis	Systemic disease link to periodontal disease
9-10	Infectious diseases (viral, bacterial)	Infectious disease management	Infectious diseases and periodontal health	Oral infections and periodontal implications
11-12	Soft tissue lesions (fibroma, pyogenic granuloma)	Clinical management of soft tissue diseases	Hard tissue pathologies, bone loss	Soft vs. hard tissue pathologies
13-14	Non-plaque induced gingival lesions	Oral diagnosis and therapy	Non-plaque induced lesions	Classification and

				management protocols
15-16	Salivary gland pathologies (sialadenitis, etc.)	Diagnosis of salivary disorders	Impact of salivary conditions on periodontium	Salivary dysfunction in periodontal disease
17-18	Regressive alterations of teeth	Diagnostic approaches in oral pathology	Regressive changes affecting periodontium	Tooth wear effects on periodontal health
19-20	Radiological features of oral pathologies	Radiology in oral diagnosis	Radiological assessment in periodontology	Importance of radiology in diagnosis
21-22	Advanced periodontal diseases	Systemic conditions in periodontal disease	Aggressive and necrotizing periodontitis	Systemic links to advanced periodontal disease
23-24	Oral cancer and precancerous lesions	Early detection and management	Role of periodontists in identifying lesions	Periodontal exam's role in early cancer detection
25-26	Immunology in oral disease	Autoimmune diseases in oral health	Host-microbe interactions	Immunological link to periodontal disease
27-28	Infectious and systemic disease pathology	Systemic disease oral manifestations	Periodontal therapy in	Periodontal-systemic disease interplay

			compromised patients	
29-30	Case-based oral pathology	Case-based clinical diagnosis	Multidisciplinary periodontal treatment	Integration through clinical case reviews
31-32	Revision of pathology concepts	Review of clinical diagnostic skills	Review of periodontal treatments	Holistic patient management

Week	Oral Pathology	Oral Medicine	Periodontology	Integration Focus

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3-4	Benign/malignant oral lesions	Management of oral lesions	Plaque biofilm, calculus	Lesions affecting periodontium
5-6	Oral cancer, leukoplakia, erythroplakia	Diagnosis and management of lesions	Periodontal disease risk factors	Oral cancer impact on periodontium
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13-14	Non-plaque induced gingival lesions	Oral diagnosis and therapy	Non-plaque induced lesions	Classification and management protocols
15-16	Salivary gland pathologies (sialadenitis, etc.)	Diagnosis of salivary disorders	Impact of salivary	Salivary dysfunction in

			conditions on periodontium	periodontal disease
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RAHBAR COLLEGE
OF DENTISTRY

Study Guide

Third Year BDS

Rahbar College of Dentistry

Lahore

RAHBAR COLLEGE
OF DENTISTRY

Department of Medicine

Study Guide

Third Year BDS

Rahbar College of Dentistry

Lahore

Author of Study Guide:

Department Name

General Medicine

Head of Department

Dr. M. Arshad Khan (Assistant Professor of Medicine)

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Study Guide of Department of Medicine

General Medicine includes the following specialties which are as follows:

- Central Nervous System
- Cardiovascular System
- Gastrointestinal Tract and Diseases of Liver and Biliary Tract
- Infectious Diseases
- Endocrinology and Diabetes/ Metabolic diseases
- Respiratory System
- Haematology
- Nephrology & Acid Base, Water and Electrolytes

Modes of Information Transfer:

- Interactive Lectures
- Tutorials
- Clinical Demonstrations/Bedside
- Case Presentations
- Patients Simulations
- Role Plays

LEARNING OBJECTIVES:

1. Introduction to the basics of clinical practice in Medicine.

2. To get focused history and understand the importance of patient's biodata, presenting complaints, history of presenting complaints to reach the comprehensive diagnosis.

3. To Perform Physical examination of all the body systems and then document efficiently in the medical record.

4. Formulate the differential diagnosis with justification.

5. Demonstrate effective interpersonal communications skills with patients and as a member of the healthcare team.

6. Demonstrate infection control standards

7. Ensure patient's safety.

General Medicine

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SUBJECT SPECIFIC LEARNING OUTCOMES

Department of Medicine **Knowledge**			
Topic	**Learning Objectives** **At the end of the session, students will be able to:**	**Mode of Information Transfer**	**Assessment Tool**
Infectious Diseases	KNOWLEDGE • Describe the etiology, pathogenesis, clinical presentation, appropriate investigations & management principles of various systems along with special emphasis on oral manifestations of systemic diseases SKILL • Identify at least five oral manifestations associated with systemic diseases ATTITUDE • Time management • Communication skills	Interactive Lectures/ Bedside teaching	MCQ/SEQ/Viva OSCE

	• Attendance • Active learning • Problem solving • leadership		
Kidney and Urinary Diseases	KNOWLEDGE • Describe the etiology, pathogenesis, clinical presentation, appropriate investigations & management principles of various systems along with special emphasis on oral manifestations of systemic diseases SKILL • Identify parts of the kidney and their functions. • Perform a urine dipstick test. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • leadership	Interactive Lectures/ Bedside teaching	MCQ/SEQ/Viva OSCE
Cardiovascular Disease	KNOWLEDGE • Describe the etiology, pathogenesis, clinical presentation, appropriate	Interactive Lectures/	MCQ/SEQ/Viva OSCE

	investigations & management principles of various systems along with special emphasis on oral manifestations of systemic diseases SKILL • Identify the major components of the cardiovascular system. • Measure blood pressure and heart rate. • Perform basic cardiac auscultation. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • leadership	Bedside teaching	
Respiratory Disease	KNOWLEDGE • Describe the etiology, pathogenesis, clinical presentation, appropriate investigations & management principles of various systems along with special emphasis on oral manifestations of systemic diseases SKILL	Interactive Lectures/ Bedside teaching	MCQ/SEQ/Viva OSCE

	• Perform a peak flow measurement. • Measure respiratory rate and oxygen saturation. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership		
Endocrine Disease	KNOWLEDGE • Describe the etiology, pathogenesis, clinical presentation, appropriate investigations & management principles of various systems along with special emphasis on oral manifestations of systemic diseases SKILL • Use the model to identify glands (pituitary, thyroid, adrenal, and pancreas). ATTITUDE • Time management • Communication skills • Attendance	Interactive Lectures/ Bedside teaching	MCQ/SEQ/Viva OSCE

	• Active learning • Problem solving • Leadership		
Diabetes Mellitus	KNOWLEDGE • Describe the etiology, pathogenesis, clinical presentation, appropriate investigations & management principles of various systems along with special emphasis on oral manifestations of systemic diseases SKILL • Measure blood glucose levels using a glucometer. • Recognize and interpret blood glucose readings. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership	Interactive Lectures/ Bedside teaching	MCQ/SEQ/Viva
Alimentary Tract Diseases	KNOWLEDGE • Describe the etiology, pathogenesis, clinical presentation, appropriate investigations &	Interactive Lectures/ Bedside teaching	MCQ/SEQ/Viva OSCE

	management principles of various systems along with special emphasis on oral manifestations of systemic diseases SKILL • Perform abdominal palpation and auscultation. • Recognize signs and symptoms through patient history ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership		
Liver Diseases	KNOWLEDGE • Describe the etiology, pathogenesis, clinical presentation, appropriate investigations & management principles of various systems along with special emphasis on oral manifestations of systemic diseases SKILL • Perform abdominal palpation to assess liver size and tenderness.	Interactive Lectures/ Bedside teaching	MCQ/SEQ/Viva OSCE

	• Interpret laboratory tests related to liver function (e.g., liver enzymes, bilirubin levels). ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • leadership		
Blood Disorders	KNOWLEDGE • Describe the etiology, pathogenesis, clinical presentation, appropriate investigations & management principles of various systems along with special emphasis on oral manifestations of systemic diseases SKILL • Perform a complete blood count (CBC) interpretation. • Measure hemoglobin and hematocrit levels. ATTITUDE • Time management	Interactive Lectures/ Bedside teaching	MCQ/SEQ/Viva OSCE

	• Communication skills • Attendance • Active learning • Problem solving • Leadership		
Neurological Diseases	KNOWLEDGE • Describe the etiology, pathogenesis, clinical presentation, appropriate investigations & management principles of various systems along with special emphasis on oral manifestations of systemic diseases SKILL • Perform a neurological examination assessing motor, sensory, and cognitive functions. • Utilize standardized scales (e.g., Glasgow Coma Scale) to assess consciousness. ATTITUDE: • Time management • Communication skills • Attendance • Active learning • Problem solving • leadership	Interactive Lectures/ Bedside teaching	MCQ/SEQ/Viva OSCE

Recommended Books:

Kumar & Clark`s clinical medicine (handbook)

Davidson`s principles & practice of medicine (handbook)

Oxford handbook of clinical medicine

Oxford handbook of clinical examination & practical skills

Macleod`s clinical examination

Hutchinson`s clinical methods

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Psychomotor Domain			
Learning Domain	**Learning Objective**	**Mode of information transfer**	**Assessment tool**
History taking	At the end of clinical rotation, Students should be able take history from patients presenting with different clinical symptoms and apply the back ground medical knowledge to reach the diagnosis.	Tutorials, Clinical Demonstration	Long Case
General physical examination	At the end of clinical rotation, students should be able to perform General physical examination of the patient and interpret the clinical signs with regard to different clinical scenarios	Tutorials, Clinical Demonstration	Long Case and Short cases
Examination of GIT	At the end of clinical rotation, students should be able to perform examination of the GIT patient and interpret the	Tutorials, Clinical Demonstration	Long Case and Short cases

	clinical signs with regard to different clinical scenarios		
Examination of Respiratory System	At the end of clinical rotation, students should be able to perform the examination of Respiratory System of the patient and interpret the clinical signs with regard to different clinical scenarios	Tutorials, Clinical Demonstration	Long Case and Short cases
Examination of Cardiovascular System	At the end of clinical rotation, students should be able to perform the examination of Cardiovascular System of the patient and interpret the clinical signs with regard to different clinical scenarios	Tutorials, Clinical Demonstration	Long Case and Short cases
Examination of CNS, Motor System	At the end of clinical rotation, students should be able to perform the examination of Motor System of the patient and interpret the clinical signs with regard to different clinical scenarios	Tutorials, Clinical Demonstration	Long Case and Short cases

Examination of CNS, Sensory System	At the end of clinical rotation, students should be able to perform the examination of Sensory System of the patient and interpret the clinical signs with regard to different clinical scenarios	Tutorials, Clinical Demonstration	Long Case and Short cases
Examination of CNS, Cranial Nerves	At the end of clinical rotation, students should be able to perform the examination of Cranial nerves of the patient and interpret the clinical signs with regard to different clinical scenarios	Tutorials, Clinical Demonstration	Long Case and Short cases
Examination of CNS, Cerebellar System	At the end of clinical rotation, students should be able to perform the examination of Cerebellar System of the patient and interpret the clinical signs with regard to different clinical scenarios	Tutorials, Clinical Demonstration	Long Case and Short cases
Dermatology			
History taking and general physical examination	• Able to take history	• Small group discussion	OSCE

	• Able to perform general physical examination • Able to record accurate blood pressure Able to pick abnormal findings on general physical examination	Bedside teaching	
Localized cutaneous examination	• Able to examine lesions using magnifying glass • Able to differentiate between papulosquamous lesions • Able to differentiate between types of alopecia on examination • Able to pick different nail findings on examination	• Small group discussion • bedside demonstration bedside teaching	OSCE

Prescription writing		group discussion • bedside demonstration bedside teaching	
Procedures(observed/assist)	• Know how to perform electrocautery • Able to use magnifying glass • Observe biopsy • Able to take fungal scraping	• Small group discussion • bedside demonstration • bedside teaching	OSCE

Recommended Books:

Macleod's Clinical Examination

Bedside Techniques

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RAHBAR COLLEGE
OF DENTISTRY

Department of Oral Pathology

STUDY GUIDE 2024-2025

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Welcome Note

We take great pleasure in welcoming you to our department. Oral and Maxillofacial Pathology focuses on understanding and diagnosing diseases that affect the mouth, jaws, and surrounding areas like the salivary glands and skin around the mouth. It plays a key role in bridging basic science with clinical dentistry, helping us understand how both local and systemic conditions manifest in the oral and facial regions.

At Rahbar College of Dentistry, our Department of Oral Pathology is equipped to meet the highest standards set by the PM&DC, ensuring that our students receive a comprehensive and hands-on education. We are committed to teaching future dentists about the various diseases affecting the soft and hard tissues of the head and neck. Our curriculum emphasizes the causes, clinical presentations, radiological findings, and histopathological insights, empowering students to diagnose these conditions for effective treatment.

To all the new students joining Rahbar College of Dentistry, we warmly welcome you to our community. This is the beginning of a fascinating journey in the world of dentistry, and we wish you the very best in the years ahead. May your time here be filled with growth, learning, and success!

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Dr Muhammad Behzad Salahuddin

HOD Oral Pathology

Associate Professor

Rahbar College of Dentistry

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INTRODUCTION:

Dear Students, this study guide has been designed with an objective to facilitate you with a basic understanding of the Oral Pathology and it's working in relation to your education. It is aimed to be concise, student friendly and relevant for all those who want to stay well informed regarding their Oral Pathology course study.

This study guide includes schedule of lectures, course outline, learning objectives, the onset of practical's, class assessments, recommended books and other important aspects of Oral Pathology for your training. It shall assist you to meet the minimum requirement for a beginner, in the Third year of BDS. If you make use of this book and take guidance, it will help you to get a step ahead and discipline yourself for the near future.

The department of Oral Pathology welcomes any queries regarding the students' understanding of the subject. It is hoped that students will make maximum use of the opportunities they have been provided with. The department wishes a very bright future to all its students.

This document is an outline for the students to learn and practice Oral Pathology in the best way possible. It's informed to all students that no one book is enough to cover the vastness of the subject. For proper learning and practice a student needs to refer to a large variety of books/ literature, along with the lecture and training by their relevant professors.

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Rationale for the Oral Pathology Department

The Oral Pathology Department is committed to providing excellence in diagnostic services, education, and research in oral and maxillofacial pathology, contributing to optimal patient care and advancing the field of oral pathology.

The Oral Pathology Department plays a vital role in Diagnosing and managing oral diseases., advancing oral pathology knowledge, enhancing patient care and outcomes. Oral Pathology department Support interdisciplinary collaboration and ensuring departmental efficiency.

Furthermore, the department fosters interdisciplinary collaboration, integrating insights from basic Medical and clinical Dental Sciences. Educating future professionals about the latest research and clinical practices is also a key component, ensuring that emerging dental practitioners are equipped with cutting-edge knowledge. Ultimately, the Oral Biology Department aims to enhance oral health, prevent disease, and improve the quality of life for individuals globally.

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Departmental Details

Head of the Department	Dr. M. Behzad Salahuddin
Total Lecture	3 Lectures / week
Tutorials	1
SGDs	2

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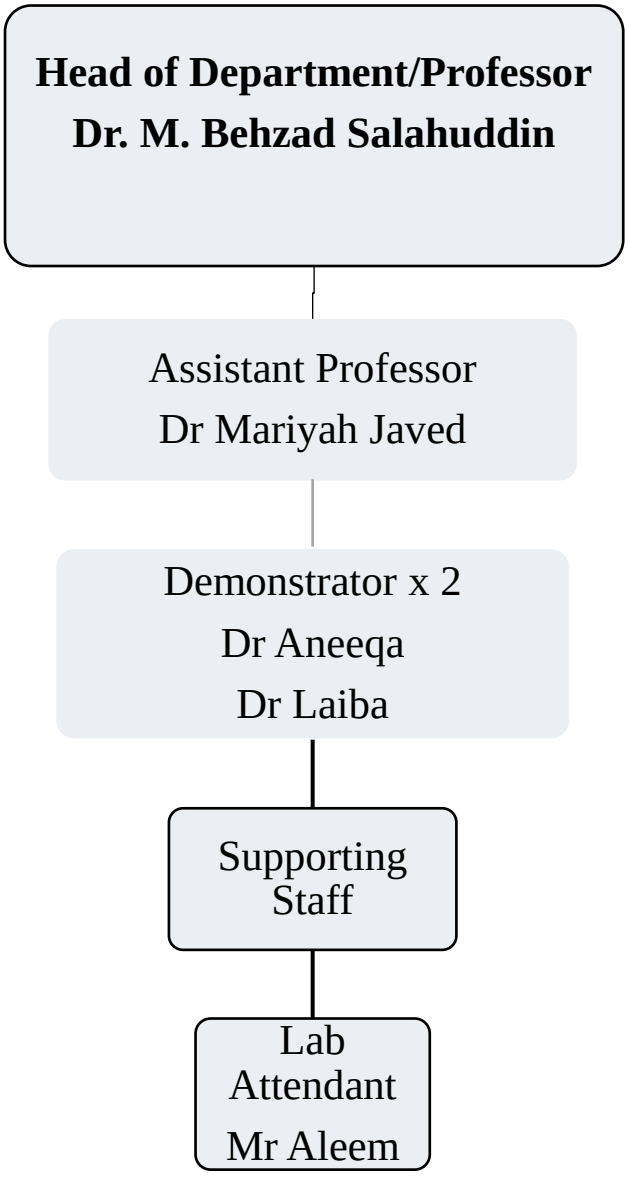
Department of Oral Pathology

Organogram



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Course Instructors

DEPARTMENT PERSONNEL	NAMES	RESPONSIBILITIES
Professor & Head of Department	Dr. M. Behzad Salahuddin	Teaching interactive lectures Training Faculty, Supervising research Taking Tutorials Moderating SGDs
Assistant Professor	Dr. Mariyah Javed	Teaching interactive lectures, Taking tutorials, Moderating SGDs
Demonstrators	1 Dr Aneeqa 2 Dr Laiba	Taking practical sessions Checking histopathological copies Moderating CBDs & SGDs, Checking log books Maintaining Attendance

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Duration: 36 weeks

Oral Pathology
Subject Specific & Integrated Learning Outcomes

Specific Learning Objective

Sr. No	Topic	Learning Outcomes	MIT	Mode of Assessment
1	**Developmental Disturbances of the Oral Region**	**Knowledge:** • Define developmental disturbances in the Size, Number, Shape, Eruption pattern of the teeth. • Enlist different causes of Enamel structure Disturbances. • Classify different stages of Amelogenesis imperfect, Dentinogenesis Imperfecta and Dentine Dysplasia. • Define Congenital Lip Pit, Double Lip, Frenal Tag, Ankyloglossia and Macroglossia. • Describe Leukoedema and White Sponge Nevus also classify Oral Tonsils and describe its different location.	Lectures, SGDs, Tutorials	MCQs / SEQs / / Viva

		• Describe Retrocuspid Papilla, Hemifacial Hypertrophy, Hemifacial Atrophy and Cleft Lip Palate. • Describe Oral Facial Digital Syndrome, Papillon-Lefevre Syndrome, Focal Osteoporotic Bone Marrow Defect, Cleidocranial Dysplasia, Crouzon Syndrome, Teacher Collins Syndrome and Down Syndrome.		
		• **Skill:** • Differentiate between Dens Invaginatus and Evaginatus, Germination and Fusion, Concrescence and Hypercementosis. • Distinguish Regional Odontodysplasia and relate to its radiographical aspect. • Interpret Fordyce Granules, Lingual Thyroid Nodule and Lingual Mandibular Salivary Gland Depression. • Draw and recognize histopathological features of common Developmental Disturbances of the Oral Region.	Practical: Draw Histopathology, and Radiographic Interpretation	OSPE / OSCE / Viva
		Attitude: • Punctuality • Good Communication • Team Work	Lecture, SGDs, Tutorials and Lab.	OSPE / OSCE / Viva

		• Professional Development		
2	**Cysts of the Oral regions**	**Knowledge:** • Define Cyst, classify different types of Cysts. • Discuss differentiating features between different types of cysts of oral cavity.	Interactive Lectures, SGDs, Tutorials	MCQs / SEQs / / Viva
		•		
		• Identify the important features (clinical, microscopic and radiographic) of common cysts of oral lesions.		
		Skill: • Discriminate histological features and assess the radiographic properties of cysts. • Draw and illustrate different types of cysts. **Integrated with OMFS:** • Management options for Jaw Cysts.	Practical: Illustration, Radiographic Interpretation	OSPE / OSCE / Viva
		Attitude: • Punctuality • Good Communication • Active listening • Team Work	Lecture, SGDs, Tutorials and Lab.	OSPE/ OSCE / Viva

		• Professional Development • Stress Management • Continuous Improvement		
3	**Infections of Teeth and Bone**	**Knowledge:** • List the etiology of Dental Caries. • Discuss the pathogenesis of Dental Caries. • Classify clinical types of Carious Lesions depending on the site of involvement and the rate of spread. • Describe the pathological changes involved in Pulpitis. • Describe the pathways of untreated Periapical infections depending on the type of the preceding Pulpitis, virulence of the Bacteria, and the presence or absence of drainage. • Identify the different types of Pulpitis and Periapical Inflammation with the help of various diagnostic tests. • Tabulate between Acute Osteomyelitis, Chronic Osteomyelitis and Garre Osteomyelitis.	Interactive Lectures, LGDs, Tutorials	MCQs / SEQs / Viva
		• **Skill:** • Differentiate the clinical features between types of caries.	Practical Illustration, Radiographic Interpretation	OSPE/ OSCE / Viva

		• Recognize the symptoms and management of Acute and Chronic Pulpitis. • Differentiate between various Periapical Infections. • Demonstrate the management of Cellulitis and Ludwig Angina. **Integrated With Operative Department:** • Diagnosis of different Pulpitis types. • Management of Acute and Chronic Pulpitis.		
		Attitude: • Punctuality • Good Communication • Active listening • Team Work • Professional Development • Stress Management Continuous Improvement	Lecture, SGDs, Tutorials and Lab.	OSPE/ OSCE
4	**Bone Lesions**	**Knowledge:** • Define and tabulate the benign fibro-osseous lesions. • Discuss Cemento-Ossifying Fibroma. • Recognize the metabolic conditions of the bone.	Interactive Lectures, SGDs, Tutorials	MCQs / SEQs / Viva

		• Recognize the different types of Giant Cell lesion of the jaw, Traumatic Bone Cyst and Langerhans Cell Histiocytosis. Discuss the Malignant Bone Neoplasms.		
		Skill: • Interpret benign tumors of the jaw, Osteoma , Osteoid Osteoma and Osteoblastoma. Draw and explain histopathological features of common Bone Lesions.	Practical Illustration, Radiographic Interpretation	OSPE/ OSCE / Viva
		Attitude: • Punctuality • Good Communication • Active listening • Team Work • Professional Development • Stress Management Continuous Improvement	Interactive Lecture, SGDs, Tutorials and Lab.	OSPE/ OSCE / Viva
5	**Odontogenic Tumors**	• **Knowledge:** • Describe odontogenesis and classify odontogenic tumors. • Describe epithelial, connective tissue and mixed odontogenic tumors. • Describe the different malignant odontogenic tumors.	Interactive Lectures, SGDs, Tutorials	MCQs / SEQs / Viva

		Identify distinguish histological features and discriminate the radiological features of Connective Tissue Odontogenic Tumors.		
		Skill: • Differentiate distinguished histological features. • Discriminate the radiological features of epithelial odontogenic tumors. • Draw and explain histopathological features of common odontogenic tumors. **Integrated with :**	Practical Illustration, Radiographic Interpretation	OSPE/ OSCE / Viva
		Attitude: • Punctuality • Good Communication • Active listening • Team Work • Professional Development • Stress Management Continuous Improvement	Lecture, SGDs, Tutorials and Lab.	OSPE/ OSCE / Viva
6	**Epithelial Disorder**	**Knowledge:** • Classify the Benign Epithelial Lesion • Discuss the Melanocyte and different types of Nevi.	SGDs, SGDs, Tutorials	MCQs/ SEQs / Viva

		• Describe Leukoplakia and Erythroplakia. • Tabulate the stages of Squamous Cell carcinomas (SCC) and also recall the less common forms of SCC. Memorize different types of Basal Cell Carcinomas and its histopathology.		
		Skill: • Differentiate types of nevi according to its types. • Interpret the different grades of SCC, the Carcinoma in situ and different degrees of Epithelial Dysplasia histopathology. • Differentiate all types of Melanoma on the basis of histopathology. • Describe the complication and implication of Epithelial Dysplasia. • Draw histopathological features of common Epithelial Lesions. **Integrated with OMFS:** Management of Common Epithelial Tumor	Practical Illustration, Radiographic Interpretation	OSPE/ OSCE / Viva
		Attitude: • Punctuality • Good Communication • Active listening	Interactive Lecture, SGDs, Tutorials and Lab.	OSPE/ OSCE / Viva

		• Team Work • Professional Development • Stress Management Continuous Improvement		
7	**Oral Infections**	**Knowledge:** • Explain the process of entry of HIV into a CD4 positive cell and the Clinical staging of HIV infection also describe the clinical features, histological features and treatment of common oral lesions in patients with AIDS. • Identify the common Bacterial, Viral and Fungal infections that affect the oral mucosa and their histopathological features. • Identify the lesions associated with Human Immunodeficiency virus (HIV). **Integrated with General Pathology:** Classify the common Oral Viruses, Bacteria and Fungai invading the oral cavity.	LGDs, SGDs, Tutorials	MCQs / SEQs / Viva
		Skill: • Illustrate Diagnosis of all viruses their clinical features, histological features, and their management.	Practical Illustration, Radiographic Interpretation	OSPE/ OSCE / Viva

		• Draw and explain histopathological features of common oral lesions. • Interpret the clinical features, histological features, investigations and management of infections caused by Streptococcus, Staphylococcus, Mycobacterium, Treponema Pallidum, Syphilis And Actinomyces. • Recognize clinical and histological features, diagnosis and management of the different types of oral candidiasis. **Integrated with Oral Medicine:** Treatment of Herpes Simplex Viruses, Candidiasis, AIDS.		
		Attitude: • Punctuality • Good Communication • Active listening • Team Work • Professional Development • Stress Management Continuous Improvement	Lecture, SGDs, Tutorials and Lab.	OSPE/ OSCE / Viva
8	**Immune-Mediated Disorders**	**Knowledge:** • Describe the various types of Recurrent Aphthous Stomatitis and Behcet Syndrome.	Lectures, SGDs, Tutorials	MCQs / SEQs / Viva

		• Identify different types of Lupus Erythematous and Progressive Systemic Sclerosis. • Memorize major categories of Epidermolysis Bullosa and the precipitating factors of Erythema Multiforme. • Recognize the clinical features of Immune-Mediated Reactions like Cheilitis Glandularis, Orofacial Granulomatosis, Chronic Granulomatous Disease, Sarcoidosis and Wegener Granulomatosis. • Identify the Lichenoid Drug Reaction on the basis of patient drug history and the different Allergic Reactions i.e. Contact Stomatitis and Angioedema.		
		Skill: • Differentiate between Mucous Membrane Pemphigoid and Pemphigus Vulgaris also compare differentiating features among types of Lichen Planus and their histopathological sections • Illustrate tissue diagnosis of Erosive Diseases of mucosa under the headings of location, antigen and direct immunofluorescence. • Draw and explain histopathological features	Practical: Illustration, Radiographic Interpretation	OSPE/ OSCE

		of common Immune Mediated Disorders **Integrated with Oral Medicine:** • Management of common Immune Mediated Disorders e.g Aphthous Ulcers, Vesiculobullous Diseases		
		Attitude: • Punctuality • Good Communication • Active listening • Team Work • Professional Development • Stress Management • Continuous Improvement	Lecture, SGDs, Tutorials and Lab.	OSPE/ OSCE / Viva
9	**Connective tissue lesion**	**Knowledge:** • Classify the Connective Tissue lesions on the basis of age group and different Fibrous Hyperplasia's on the basis of their histopathology and clinical features. • Describe Hyperplasia and Neoplasm of lesions originating from Fibrous Tissue, Neural Tissue, Muscle and Adipose	LGDs, SGDs, Tutorials	MCQs/ SEQs / Viva

		Tissues, Vascular and Osseous Tissue. • Discriminate among the developmental and Reactive Lesions of Osseous and Cartilaginous Tissue origin. • Recognize the clinical features of Multiple Endocrine Neoplasia Syndrome. Identify among Reactive, Hamartomas, Benign and Malignant lesion of different origins on the basis of clinical feature and histopathology.		
		Skill: • Differentiate benign and Malignant Neoplasms of Fibrous tissue on the basis of histopathology and clinical features. • Illustrate the Hamartomas, Benign and Malignant Neoplasms of Neural tissue on the basis of their pathogenesis . • Evaluate the Vascular Tissue and Neoplasms Draw histopathological features of common Connective Tissue Lesions.	Practical Illustration, Radiographic Interpretation	OSPE/ OSCE / Viva
		Attitude: • Punctuality • Good Communication • Active listening • Team Work	Lecture, SGDs, Tutorials and Lab.	OSPE/ OSCE / Viva

		• Professional Development • Stress Management Continuous Improvement		
10	**Salivary Gland Disorders**	**Knowledge:** • Identify the position of the Salivary Glands and the associated structures. • List the common causes of Chronic Sclerosing Sialadenitis. • Describe Sjogren's syndrome in detail. • Classify Salivary Gland Tumors according to the WHO. Identify the tests suitable for the diagnosis of salivary gland pathology.	Interactive Lectures, SGDs, Tutorials	MCQs / SEQs / Viva
		Skill: • Differentiate between Mucocele and Mucus Retention Cyst on the basis of their clinical and histological features. • Outline the causes and treatment of Sialorrhea and Xerostomia. • Discuss in detail benign and Malignant Tumors Of Salivary Glands e.g Pleomorphic Adenoma, Papillary Cyst Adenoma Lymphomatosum, Oncocytoma, Adenoid Cystic Carcinoma,	Practical Illustration, Radiographic Interpretation	OSPE/ OSCE / Viva

		Mucoepidermoid Tumor, Adenocarcinoma. • Draw histopathological features of common Salivary Gland Disorders **Integrated with OMFS:** Investigation of Salivary Gland Disorders		
		Attitude: • Punctuality • Good Communication • Active listening • Team Work Professional Development	Interactive Lecture, SGDs, Tutorials and Lab.	OSPE/ OSCE / Viva
11	**Physical and Chemical Injuries**	**Knowledge:** • Identify physical and chemical injuries effecting teeth and soft tissue of oral cavity. • Identify the chemical injuries which affect the hard and soft tissues. • Describe the effect of amalgam and graphite on the mucosal tissue. • Explain the effects of systemic disease on the hard and soft tissue like Congenital Porphyria, Biliary	Lectures, SGDs, Tutorials	MCQs / SEQs / Viva

		Atresia and Erythroblastosis Fetalis. • Describe Benign Migratory Glossitis, Traumatic Atrophic Glossitis, Fissure Tongue and Hairy Tongue. Enlist the effects of drugs on gingiva and hard tissue also differentiate the chemical burns from Acetylsalicylic acid and other medication.		
		• **Skill:** • Define and attrition, abrasion, erosion on the basis of clinical feature. • Compare mucosal tissue injuries i.e. factitious injury, denture injury, electrical and thermal burn and the injuries caused by the radiation on the basis of clinical picture, sign and symptoms. Differentiate radiographically between external and internal resorption.	Practical Illustration, Radiographic Interpretation	OSPE/ OSCE / Viva
		Attitude: • Punctuality • Good Communication • Active listening • Team Work • Professional Development • Stress Management Continuous Improvement	Interactive Lectures, Tutorials and Lab.	OSPE/ OSCE / Viva
12		**Knowledge:**		

	Diseases of Blood	• Classify Anemia and explain their effects on the oral mucosa also relate differing features among Leukopenia, Neutrophil Function Disorder and Leukocytosis • Discuss the Neoplasm of White Blood Cells. • Demonstrate White Blood Cells i.e. Hodgkin's Lymphoma, Non-Hodgkin's Lymphomas, MALT lymphoma, Burkett Lymphoma and Multiple Myeloma. • Identify the clinical features and radiographic properties of Thalassemia, Anemia and Platelet Disorders i.e. Thrombocytopenia. • Describe the platelet disorders i.e. Capillary Fragility and Coagulation Disorder which includes Hemophilia. **Integrated With General Medicine:** • Define and classify Anemia types, Thalassemia and Thrombocytopenia. • Describe the platelet disorders i.e. Capillary Fragility and Coagulation Disorder which includes Hemophilia	Interactive Lectures , SGDs, Tutorials	MCQs / SEQs / Viva

		Skill: • Draw histopathological features and identify radiographic features of common diseases of blood.	Practical Illustration, Radiographic Interpretation	OSPE / OSCE / Viva
		Attitude: • Punctuality • Good Communication • Active listening • Team Work • Professional Development • Stress Management • Continuous Improvement	Lecture, LGDs, Tutorials and Lab.	OSPE / OSCE / Viva

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INTEGRATED TEACHINGS

CORE SUBJECT : ORAL PATHOLOGY

	1ST YEAR	2ND YEAR	3RD YEAR	4th YEAR	EXTRA COURSES
Subject		**General Pathology**	**Oral Medicine**	**OMFS**	
Topic		Oral Cavity Tumors	Oral Infections	Salivary Gland Pathology	
SLOs		Classification of Benign and Malignant Salivary Gland, Bone and Soft Tissue Tumors.	Pathophysiology of common oral infections	Classification and Pathophysiology of salivary gland diseases.	
Topic		Oral Cavity Tumour Markers		Oral Squamous Cell Carcinoma.	
SLOs		SCC, Melanoma, Connective Tissue		Pathophysiology of oral squamous cell carcinoma.	
Topic		Epithelium Lesions			
Subject				**Orthodontics**	
SLOs		Premalignant Conditions		Enlist etiology, pathophysiology and clinical features of common Oro-Facial Syndromes.	
Subject				**Peadodontics**	
SLOs					

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ASSESMENT

3rd YEAR BDS

ORAL PATHOLOGY

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Total Marks: 180

Theory: 90 marks

MCQs: 45 marks

SEQs: 45 marks

Practical & Viva: 90 marks

Practical: 35 marks

OSPE: 20 marks

Long slide: 5 marks

Log book: 10 marks

VIVA: 45 marks

Internal: 25 marks

External: 20 marks

Internal assessment: 10 marks

Pass marks: 50% in each of the written and Clinical Assessment/Viva components of the exam separately.

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Learning Resources

Resource material & reference books

Resource material

Lecture Hall

Tutorial Room

Oral Pathology Lab

Recommended Reading Books

- Sapp, J.P. contemporary Oral & Maxillofacial Pathology, 2nd Edition, Mosby-St. Louis
- Regezi, j.a. Oral Pathology: clinical pathologic correlations, 5th Edition. Elesvier-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

Reference Books:

- Jose. Manual of Oral Histology & Oral Pathology: colour atlas and text, 1st Edition. CBS-New Delhi.
- Manjunath. Oral Pathology exam preparatory manual for undergraduates. CBS-New Delhi.
- Rajendran, R. Shafer's textbook of Oral Pathology, 6th Edition. Elsevier-St. Lou

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RAHBAR COLLEGE
OF DENTISTRY

ORAL MEDICINE

STUDY GUIDE

3RD YEAR

BDS 2025

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WELCOME NOTE BY HEAD OF DEPARTMENT:

Welcome to the Oral Medicine Department! We're genuinely excited to have you with us as you start this new chapter in your education and professional growth. Oral medicine is a fascinating field that connects the health of the mouth with the entire body, and we're here to help you navigate this journey with curiosity, passion, and purpose.

Our faculty and staff are not just here to teach you—they're here to mentor, guide, and support you. You'll be learning from experts who are deeply invested in your success, both academically and personally. Over the course of your studies, you'll explore how oral health is connected to overall well-being, how to diagnose complex conditions, and how to care for patients with compassion and professionalism.

We encourage you to dive in, ask questions, and actively participate in every learning opportunity. The knowledge and skills you gain here will shape you into a confident, caring dental professional ready to make a difference in your patients' lives.

We're thrilled to be a part of your journey and can't wait to see the impact you'll have, both in our department and in the world of oral health care.

RATIONALE FOR THE COURSE/DEPARTMENT:

Oral diseases and lack of awareness possess a big problem in Pakistani population. It is of utmost importance that patient must be diagnosed correctly and treatment plan to be designed. This specialty of dentistry deals with the diagnosis and non-surgical management of diseases related to oral mucosa, orofacial pain, oral manifestations of systemic diseases, salivary gland diseases and the management of dental issues in medically compromised patients.

This curriculum is designed to guide the students to diagnose and manage the orofacial pain, Temporo-mandibular issues, and oral and maxillofacial diseases. Students will learn and be able to take comprehensive patient history, physical examination, advice appropriate investigations and establish the diagnosis and treatment planning.

In dentistry, oral medicine deals with diagnosis and treatment of oral mucosal diseases which may reflect either local oral disease or manifestations of systemic problems. It relates to the diagnosis and management of Temporo-mandibular disorders, neuropathic pain in orofacial region and so on.

In clinics, the objective is to emphasize on the responsibility of dental students to take medical and dental history, perform head and neck plus oral examination to facilitate safe dental care for patients.

Course Significance and scope:

The oral medicine department's main focus is the healthcare of acute and chronic medically related disorders of the oral and maxillofacial region (e.g. the mouth, jaws, face and neck).
Our specialism is the diagnosis and medical management of patients.

The oral medicine department provides expert diagnosis and treatment of jaw deformities, oral mucosal disease, oral abnormalities associated with systemic illness

The oral medicine department also plays a key role in the treatment of Temporomandibular Disorders that present with pain in the jaw joint.
We also diagnose, treat, and alleviate symptoms for all oral medical problems including oral mucosal diseases, such as ulcers and blisters in the lining of the mouth, bacterial, viral infections, Candidiasis, Precancerous Lesions, Leukoplakia, Autoimmune Diseases that create problems in the mouth as part of the manifestations of an inflammatory disease or systemic disease such as Sjogren's Syndrome, Neurological or Hematological disorders that accompany oral problems, and Xerostomia.

For patients suffering from systemic diseases such as hypertension or diabetes, we offer safe treatment with appropriate monitoring of the patient's condition in conjunction with the patient's primary physician

In addition to patient care, Out Patient department providing undergraduate training to third year students including:

Clinical Demonstrations:

- Proper treatment planning sessions
- Ordering relevant investigations
- Referral to the concerned departments
- Regular follow ups

Formative assessments are conducted throughout the academic session to improve the shortcomings identified during session. At the end of the each session summative assessment through professional examinations are conducted by team of internal and external examiners.

Patient evaluation and diagnosis including patients presenting with:

- Patients with red and white oral patches where cancer is not suspected
- Pigmented oral lesions
- Oral lumps
- Oral ulcers
- Infections on the oral cavity
- Oral manifestations of systemic disease
- A dry mouth
- Oro-facial pain of non-dental origin

Co-Relation of non clinical subjects with Oral Medicine :

Non-clinical subjects are crucial to oral medicine, providing the foundational knowledge necessary for effective treatment. **Dental anatomy and physiology** help in understanding tooth and orofacial structures, help to diagnose the diseases. **Biochemistry** and **microbiology** inform caries management and infection control, while **pathology** aids in diagnosing diseases affecting oral tissues. **Pharmacology** is vital for using anesthetics and antibiotics during procedures; **dental materials** knowledge ensures the oral manifestations of used materials while **behavioral sciences** improve patient communication and care. Together, these subjects enhance clinical skills in oral medicine.

Innovative Student Centered Teaching Methods:

Innovative teaching methods in Oral medicine include **Problem-Based Learning (PBL)**, where students work in groups to solve clinical scenarios, fostering critical thinking and collaboration. The **flipped classroom** allows students to know about radiology. **Simulation-based learning** offers a safe environment for skill development, while **peer teaching** reinforces understanding and communication. **Case-based learning** applies theoretical knowledge to real cases, and **competency-based education** ensures mastery of essential skills. **Interprofessional education** promotes teamwork, **service-learning** integrates community service, **digital platforms** enhance flexibility, and **reflective practice** encourages self-awareness and improvement in clinical skills.

Support options for students:

Support options for students in Oral medicine include well-equipped **clinic**,, and **research facilities** to enhance diagnostic skills. **Faculty support** through mentorship, dedicated office hours for tutoring, and interdisciplinary collaboration fosters personalized learning. **Clinical experience opportunities**, such as community service, provide practical exposure. **Peer support networks**, including study groups and organizations, promote teamwork, while **academic resources** like libraries and workshops enrich learning. **Continuous feedback** and **wellness services** ensure students' progress and well-being throughout their education.

DEPARTMENTAL DETAILS:

Head of department	**Assistant Prof. Dr Ehsan Rathore**
Study Guide developed by	**Assistant Prof. Dr Ehsan Rathore** **Assistant Prof. Dr. Ammara Anwar**

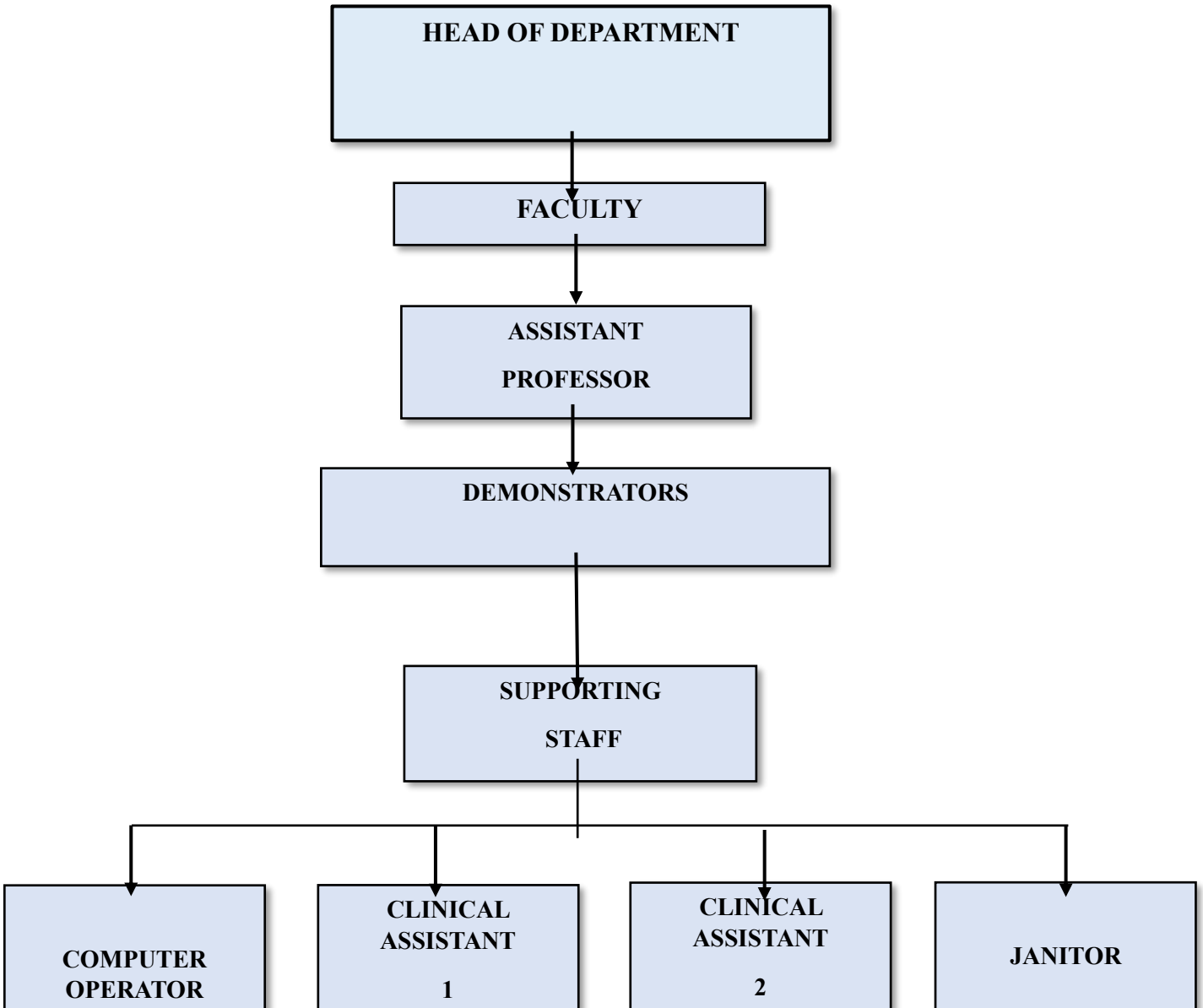
COURSE DIRECTOR:

Asst. prof Dr Ehsan Rathore Head Of Department

CONTRIBUTORS:

Dr Ammara Anwar Assistant Professor

DEPARTMENTALORGANOGRAM



COURSE INSTRUCTORS:

Sr no.	Name	Designation
1.	Asst. Prof Dr Ehsan Rathore	Associate Professor
2.	Dr. Ammara Anwar	Assistant Professor

CLINICAL ROTATION PLAN:

LIST OF PROCEDURES
Diagnosis & Treatment planning
Interpretation of Periapical Radiograph and OPG
Prescription writing

CLINICAL DEMONSTRATION SCHEDULE

DEMONSTRATION TOPICS:

1. **History and Examination**
2. **Oral manifestations of Systemic Disease**

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3. Medical Emergencies in dental practice and their management

FACULTY DUTY ROSTER
3rd YEAR BDS

DAY	LECTURE 8:00am-9:00am (Mon) 9:00am-10:00am (Wed,Thurs)	CLINIC 10:15am-2:00pm
Monday	-	-
Tuesday	-	-
Wednesday	-	Dr. Ammara Anwar Demo 1, Demo 2
Thursday	Dr. Ehsan Dr Ammara Anwar	Dr. Ammara Anwar Demo 1, Demo 2
Friday	-	Dr. Ammara Anwar Demo 1, Demo 2

Oral MEDICINE
Subject Specific & Integrated Learning Outcomes

S. No.	Topic	Learning Outcomes	MIT	Mode of Assessment

1.	**Normal oral mucosa. Abnormal oral mucosa.**	**Knowledge** • Discuss normal mucosa, its cells and their function. • Discuss abnormalities and their consequences.	Large Group Discussion	MCQs, SEQs, VIVA
		Skill • Observe normal mucosa. • Color changes in abnormal mucosa.	Practical	OSPE
		Attitude • Time management • Communication skills • Attendance • Active listening • Problem solving • Leadership	Practical/ SGD	OSPE
2.	**Principles of oral medicine: assessment and investigation of patients**	**Knowledge** • Classify history taking and investigations. • Understanding different investigation.	Large Group Discussion	MCQs, SEQs, VIVA
		Skill • Approaching a patient. • Examining a patient. • Advising investigations as per condition.	Practical	OSPE
		Attitude • Time management • Active listening. • Communication skills.	Practical	OSPE
3.	**Therapy**	**Knowledge** • **Understanding different preparations used to prescribe for diseases** • **Understanding complications of commonly used medicines.**	Interactive Lectures Interactive Lectures	MCQs, SEQs, VIVA
4.	**Infections of the gingivae and oral mucosa**	**Knowledge** • Outline different organisms that may cause infection. • Enlist different bacterial diseases • Enlist different fungal infections • Enlist different virus diseases. • Discuss all diseases and their management.	Large Group Discussion	MCQs, SEQs, VIVA
		Skill • Examining patients presenting with specific diseases. • Identifying symptoms and linking them. • Advising the investigations required.	Practical	OSPE

		• Prescribing medications according to diseases.		
		Attitude • Time management • Communication skills • Team work • Attendance • Punctuality • Critical thinking • Self directed learning	Practical/ case based discussion	OSPE, VIVA
5.	**Oral ulcerations**	**Knowledge** • Classify types of ulcers • Enlist recurrent ulcerations. • Illustrate pathophysiology	Interactive lectures/ SGD	MCQs, SEQs, VIVA
		Skill **Clinical checkup of patients.** **Treating the patients**	Practical	OSPE
		Attitude • Time management • Communication skills • Attendance • Punctuality • Problem solving • Stress management		
6.	**Diseases of the lips and tongue and disturbances of taste and halitosis**	**Knowledge** • Enlist diseases of lips and tongue • Discuss causes of halitosis • Identify disturbances of taste	Large Group Discussio n	MCQs, SEQs, VIVA
		Skill • Clinically identify the patients of addressed diseases.	Practical/ SGD	OSPE
		Attitude • Time management • Attendance • Self-directed learning • Critical thinking	Practical/ SGD	VIVA/ OSPE
7.	**Swelling of face and neck**	Knowledge Making differential diagnosis.	Large Group Discussio n/	MCQs, SEQs, VIVA
		Skill • Understanding differential diagnosis clinically	Practical/ SGD	OSPE

		Attitude • Time management • Communication skills • Team work • Attendance • Active listening • Problem solving • Leadership • Stress management	Practical/ SGD	OSPE
8.	**Salivary glands and saliva**	**Knowledge** • Enlist functions of saliva • Outline diseases of salivary glands • Classify investigations rendered for salivary gland diseases • Classify salivary gland tumors • Enlist syndromes attached with salivary glands. • Integration with Oral Pathology. • Histopathology of salivary gland diseases.	Large Group Discussion	MCQs, SEQs, VIVA
		Skill • Clinical checkup of patients. • Prescription for diseases.	SGD/ Practical	OSPE
		Attitude • Time management • Communication skills • Punctuality • Active listening • Leadership • Stress management	SGD/ Practical	OSPE/ VIVA
9.	**Inflammatory overgrowths, developmental and benign lesions, and pigmentation of the oral mucosa**	**Knowledge** • Discuss inflammatory overgrowths • Highlight benign lesions • Identify color changes in mucosa	Interactive lectures	MCQs, SEQs, VIVA
		Skill • Identify inflammatory growths • Illustration of pigmented mucosa	Practical/ PBL	OSPE
		Attitude • Time management • Communication skills • Team work • Punctuality • Active listening • Problem solving • Adaptability & flexibility • Leadership	Interactive lectures/ SGD/ Practical	OSPE

		• Continuous improvement		
	----------	**nowledge** • Define oral mucosa • Outline the boundaries of Oral Cavity & tissues in Oral Cavity • Enlist the functions of Oral Mucosa • Outline the components tissues, lymphoid tissues & glands of oral mucosa • Enlist layers of oral epithelium • Enlist the non-keratinocytes in oral epithelium • Arrange the ultrastructural features & functions of non-keratinocytes • Highlight the junction of the epithelium & lamina propria • Illustrate the structural variations of masticatory & lining mucosa • Differentiate lingual papillae according to their location, structure, histology and specification to type of taste • Express the mucocutaneous, mucogingival & dentogingival junctions • Summarize the development of oral mucosa • Corelate the changes that takes place in oral mucosa with age	Clinical Rotation Large Group Discussion/ Clinical Rotation to Oral Diagnostics	MCQs, SEQs, VIVA
		Skill • Illustrate the histological components of oral mucosa • Identify the epithelium of oral mucosa on microscope • Draw and label the histology of orthokeratinized, parakeratinized & non-keratinized epithelium • Illustrate different types of lingual papillae • Draw and label the structure of a taste bud • Illustrate mucocutaneous & dentogingival junction	Practical/ SGD	OSPE
		Attitude • Time management		

		• Communication skills • Team work • Attendance • Punctuality • Active listening • Problem solving • Adaptability & flexibility • Leadership • Continuous improvement • Stress management • Empathy & Compassion • Patient handling	SGD/ Lecture/ Practical	OSPE/ VIVA
10	**Premalignant lesions and conditions and Oral cancers**	**Knowledge** • Describe precancerous lesions and conditions. • Describe Leukoplakia, types of Leukoplakia. • Management of precancerous lesions • Describe precancerous conditions (Oral submucous fibrosis, lichen planus) • Management of pre cancerous conditions. • Describe etiological factors of oral squamous cell carcinoma. • Clinical features of oscc, staging system of oral cancers. • Discuss management of oscc ,prevention of oral carcinomas • Discuss oral carcinomas and genetic involvement	Interactive lectures	MCQs, SEQs, VIVA
		• **Skills** • students should have sound knowledge of white and red lesions that may progress to cancerous lesions. They will be able to diagnose and manage pre-cancerous conditions. They will also be taught to differentiate between pre-cancerous lesions and conditions • management of a patient undergoing chemo and radiotherapy.	Clinical Rotation to oral diagnostic deptt	OSPE
		Attitude • Time management	Practical	OSPE

		• Communication skills • Attendance • Punctuality • Problem solving • Continuous improvement		
11	**Mucocutaneous diseases and connective tissue disorders**	**Knowledge** • Relate different mucosal symptoms with dermal signs to diagnose and treat mucocutaneous blistering disorders. • And know the difference between all vesicobullous lesions by means of comprehensive history and clinical evaluation • Differentiate between Mucocutaneous diseases and immunobullous lesions. • Describe connective tissue diseases Discussion on management of vesicullobullous lesions.	Interactive lectures	MCQs SEQs VIVA
		Skill • Diagnose the patient with Mucocutaneous and immunobullous lesions. • Manage patient with vesicullobullous lesions	Rotation Clinical rotation to oral diagnostic deptt	OSPE
		Attitude • Communication skills • Team work • Attendance • Punctuality • Active listening • Problem solving • Patient handling	Practical/	
12	**Gastrointestinal Diseases**	**Knowledge** • Discussion of gastrointestinal diseases and their oral manifestations.	Interactive lectures	MCQ, SEQ, VIVA

		• Differentiate between crohn's disease and inflammatory bowel disease and their oral manifestations. **skills** • Identify the oral symptoms of GIT diseases • Management of symptoms of GIT diseases in oral cavity. **Attitude** • Communication skills • Team work • Attendance • Punctuality • Active listening • Problem solving • Patient handling	Clinical rotation to oral diagnostic Practical	
13	**Blood and Nutrition, endocrine disturbances, and renal disease**	**Knowledge** • Describe oral manifestations of blood related disorders. • Discuss anemias and leukaemias and their oral manifestations. • Describe platelet abnormalities and oral manifestations • Describe oral manifestations of nutritional deficiencies. • Describe oral manifestations of endocrine disturbances. • Describe oral manifestations of renal diseases (chronic renal failure, patient on renal dialysis and renal transplant patient) • **Skills** • Identify oral manifestations of blood related disorders • Identify and manage oral symptoms of diseases due to nutritional deficiencies	Interactive lectures Clinical Rotation to oral diagnostic	MCQs, SEQs, VIVA

		• Identify and manage oral symptoms of different endocrine disturbances and renal diseases **Attitude** • Communication skills • Team work • Attendance • Punctuality • Active listening • Problem solving	practical	MCQs SEQs Viva/ OSPE
	Immuno-Deficiency , hypersensitivity Autoimmunity, and oral reactions to Drug therapy	Patient handling **Knowledge** • Describe different immune-mediated diseases that may show signs and symptoms in the oral cavity • Describe hypersensitivity reactions and their oral manifestations. • Describe drug reactions and their signs in oral cavity **Skills** • Identify and manage the patients with signs and symptoms of hypersentivity reactions in oral cavity. • Identify and manage the patients with signs and symptoms of drug reactions **Attitude** • Communication skills • Team work • Attendance • Punctuality • Active listening • Problem solving • Patient handling	Interactive session Clinical; rotation in oral diagnostic Practical	MCQs SEQs Viva/ OSPE
	Facial pain and Neurological Disturbances	**Knowledge** • Discussion on nerve supply to the face. • Classify different types of headache (Migraine, cluster headache • Describe neuralgias (trigeminal neuralgia, glossopharyngeal neuralgias, post herpetic neuralgic pain)	Interactive session	MCQs

	Temporo-Mandibular Disorders	• Describe neurological disturbances (facial nerve deficit) • Differentiate between UMNL and LMNL and identify various causes of such conditions as well as their management **Skills** • Identify and manage patient with headaches • Identify and manage patient with neurogenic pains • Identify and manage patient with neurological disturbances **Attitude** • Communication skills • Team work • Attendance • Punctuality • Active listening • Problem solving • Patient handling **Knowledge** • Discuss an overview of TMJ anatomy • Understand the TMJ and disorders related to it. • Discuss TMJ dysfunction syndrome • Discuss internal derangements of TMJ • Discussion of systemic diseases and association with TMJ (rheumatoid arthritis • Describe Masseteric hypertrophy and tumours of TMJ **Skills** • Identify the patient with TMPDs and manage. • Diagnose and manage the patient with internal derangements of TMJ.	Clinical rotation to oral diagnostic Practical Interactive session Clinical rotation to oral diagnostics	SEQs Viva/ OSPE MCQs SEQs Viva/ OSPE

	Psychogenic orofacial problems	**Attitude** • Communication skills • Team work • Attendance • Punctuality • Active listening • Problem solving • Patient handling **Knowledge** • Describe chronic orofacial pain (Burning mouth syndrome) • Describe disturbances in taste and salivation (delusional symptoms eating disorders, drugs and alcohol) **Skills** • Diagnose and manage the patients with chronic psychogenic pains	Interactive session Clinical rotation to oral diagnostic	Practical MCQs SEQs Viva/ OSPE
	Disorders of the teeth bone	**Attitude** • Communication skills • Team work • Attendance • Punctuality • Active listening • Problem solving • Patient handling **Knowledge** **Describe disorders of teeth** • Hypodontia • Variations in eruptions • Variations in size and shapes **Describe disorders of bone** Developmental, metabolic, and from unknown etiology **Skills**	Interactive session Clinical rotation to oral diagnostic	Practical MCQs SEQs Viva / OSPE

	Medical Emergencies in Dentistry	Diagnose the disorders of teeth and bones **Attitude** • Communication skills • Team work • Attendance • Punctuality • Active listening • Problem solving • Patient handling **Knowledge** • Describe medical emergency • Discussion about the prevention of medical emergencies in dentistry • Pharmacology of drugs (route of administration of drugs) • Emergency drugs and equipment **Skills** • Management of medical emergencies in dental clinic **Attitude** • Communication skills • Team work • Attendance • Punctuality • Active listening • Problem solving • Patient handling	Interactive session Clinical rotation in oral diagnostics	Practical MCQ SEQs Viva/ OSPE Practical

DEPARTMENTAL INVOLVEMMENT IN INTEGRATED TEACHINGS

CORE SUBJECT: ORAL MEDICINE

INTEGRATED TEACHINGS

CORE SUBJECT: ORAL MEDICINE

	1ST YEAR	2ND YEAR	3RD YEAR	3rdYEAR	EXTRA COURSES
Subject		**General Pathology**	**ORAL PATHOLOGY**	**Periodontology**	
Topic		Virology (Herpes ,CMV,EBV, Chicken pox,HIV)	Immuno/, Vesiculobollous Diseases	Necrotizing periodontal diseases	

SLOs		Management of viral diseases	Management of common Immune Mediated Disorders e.g Apthous Ulcers, Vesiculobollous Diseases	• Identify and describe necrotizing ulcerative diseases • Identify • Differentiate necrotizing ulcerative periodontitis from NUG • Management of necrotizing periodontal diseases	
Topic			Salivary gland diseases		
SLOs			Pathophysiology of salivary gland		
Topic					
Subject			**General Medicine**	**Prosthodontics**	
Topic			History taking and treatment planning	History taking and treatment planning	
SLOs			Identify the disease and diagnose the lsion	Identify the disease and diagnose the lsion	

LEARNING RESOURCES

1. **Oral and Maxillofacial Medicine**, The basis of Diagnosis and Treatment; By CRISPIAN SCULLY 3rd edition
2. **Oral and Maxillofacial Diseases**, An illustrated guide to the diagnosis and management of diseases of the oral mucosa , Gingivae, teeth, salivary glands, bones and joints; By CRISPIAN SCULLY, STEPHEN R FLINT, STEPHEN R PORTER
3. **Burket's Oral Medicine**; By GREENBERG, GLICK, SHIP
4. **Medical problems in Dentistry**; By CRISPIAN SCULLY 6th edition
5. **Tyldesley's Oral Medicine**, 5th Edition, by Anne Field & Lesley Longman.

Reference Books:

1. Birnbaum W and Dunne S (2000) **Oral diagnosis: a clinicians' guide**. Butterworth Heinemann
2. Brocklebank L (1997). **Dental Radiology – Understanding the X-ray Image**. 1st Edition, Oxford University Press
3. Prabhu SR (ed) (2004) **Textbook of Oral Medicine**.

4. A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis

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DEPARTMENT OF PERIODONTOLOGY

HOD's Message:

With immense pleasure and excitement, I welcome young and energetic students of 3rd year BDS to the department of periodontology, Rahbar college of dentistry, Lahore. Department of periodontology deals with identification, diagnosis and treatment of different conditions and diseases periodontium.

In periodontology department our aim is to familiarize the students with safe and effective protocols to interact with the patients, diagnose their problems, make a treatment plan according to specific needs and treat the patient under strict supervision of clinical faculty.

In department of periodontology, we try to provide our students with environment that is conducive, compassionate, inclusive, supportive, and safe. With proper planning, critical thinking and collaborative team work we can help each other to reach our highest potential.

I wish you all best of luck!!

RATIONALE OF COURSE

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Periodontal diseases are among the most prevalent diseases of oral cavity, it is prevalent in developed countries as well as underdeveloped regions of the world and affect around 20-50 percent of adult population. In Pakistan after dental caries periodontal diseases are most common and prevalent diseases, exact burden of disease is not known due to lack of screening and data.

Periodontology as a subject is taught in third year of undergraduate program, and it deals with the diagnosis, prognosis and management of different periodontal problems and diseases. In periodontology lectures and clinics students are encouraged and facilitated to gather recent and evidence-based knowledge and acquire necessary skills that are at par with global standards to treat their patients with safety and efficiency.

Apart from these dental/periodontal skills, students are taught interpersonal, communication and other soft skills to help them become a healer in true sense. Patient centered approach is followed that helps the student to develop a sense of empathy and communication skills.

Student centered teaching methodologies are used that allows and help students to actively participate in the teaching/learning process. These innovative techniques facilitate the students to learn team based and problem-based learning that in turn enhance their critical thinking abilities to meet the ever-evolving health care needs.

In periodontology clinics students gain real time experience by working on patient under strict supervision of the clinical staff, students go through thorough and well-planned process that makes them capable to take on the challenges of the professional practice.

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DEPARTMENTAL DETAILS

Head od Department	Dr. Iftikhar Ahsen
Total No: of Lectures	72 hours
Total No: of Tutorials	105 hours
SDGs	Every Wednesday 2pm-3pm 3 in operative dentistry department

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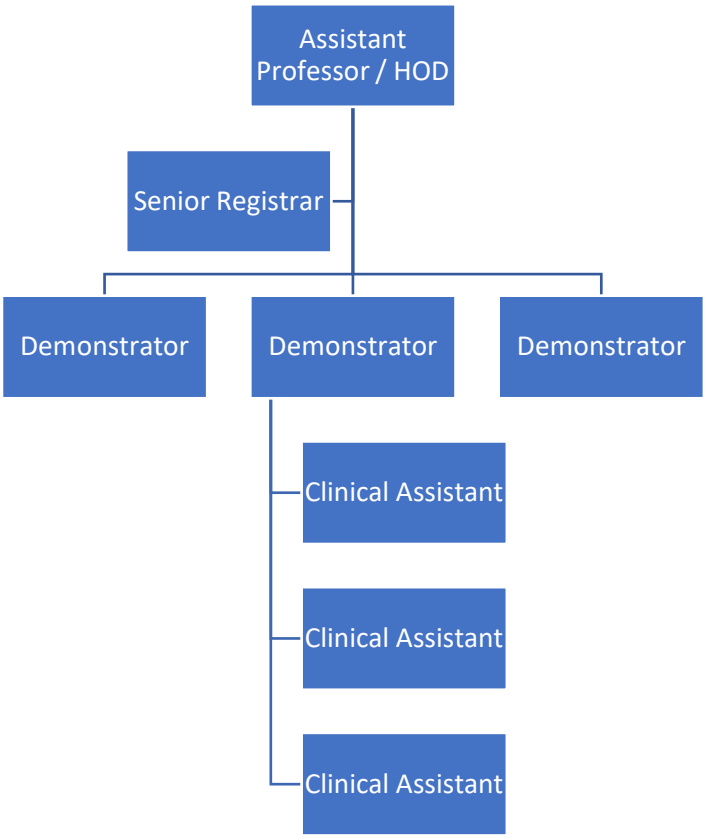
DEPARTMENTAL ORGANOGRAM



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COURSE INSTRUCTORS

S:No:	Name	Designation
01	Dr. Muhammad Iftikhar Ahsen	Assistant Professor/ HOD

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CLINICAL ROTATION PLAN

TIME TABLE 3rd YEAR BDS (2027-2028)
RAHBAR COLLEGE OF DENTISTRY

RAHBAR COLLEGE OF DENTISTRY

DAY	08:00am — 09:00am	09:00am — 10:00am	10:00am-10:15am	10:15am — 01:00pm	01:00pm — 03:00pm
Mon	General Medicine	General Surgery	Break	Clinical training-(Gen. Surgery(**Batch 1**)/ Gen Medicine(**Batch 2**)	Oral Patho **(Batch 1)** / Case discussion sessions(**Batch 2**)
Tue	Oral Pathology	Periodontology	Break	Clinical training-(Gen. Surgery(**Batch 2**)/ Gen Medicine(**Batch 1**)	Oral Patho **(Batch 2)** / Case discussion sessions(**Batch 1**)
Wed	General Surgery	General Medicine	Break	Clinical training (Op Dent., Prostho, OMFS, Perio, Oral medicine) **Batch A,B,C,D,E**	
Thurs	Oral Medicine	Oral Pathology	Break	Clinical training (Op Dent., Prostho, OMFS, Perio, Oral medicine) **Batch A,B,C,D,E**	
Fri	Oral Pathology	Periodontology	10:00am — 01:00pm	01:00pm — 02:00pm **Jummah Prayer break**	02:00Pm — 03:00pm
			Clinical training (Op Dent., Prostho, OMFS, Perio, Oral medicine) **Batch A,B,C,D,E**		

- **Batch 1** consists of students from Roll No 1- 25, **Batch 2** consists of students from Roll no 26- 50
- **Batch A,B,C,D,E** consists of 10 students each.
- Each Clinical Batch will have a rotational training of 7 weeks.

COUSE LEARNING OBJECTIVES

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S:No:	Topic	Learning Outcome	Teaching methodology	Assessment tool
1	Anatomy of Periodontium	**KNOWLEDGE:** • Describe clinical features of periodontium **INTEGRATION WITH ORAL BIOLOGY** • Compare and contrast the clinical features and microscopic features of periodontium • Identify and understand the development of attachment apparatus. • Describe microscopic features of periodontium	Interactive Lecture/SGD	MCQs/SEQs
		SKILL • Identification of different components of periodontium clinically	Clinical rotation/SGD/Lab	OSPE/OSCE
		ATTITUDE: • Time management • Problem Solving • Attendance • Active listening	Clinical rotation/SGD/ Lab	OSPE/OSCE
2	Aging of Periodontium	**KNOWLEDGE** • Describe the effects of aging on the periodontium • Relate the effect of aging on the progression of periodontal disease.	Interactive Lecture/SGD	MCQs/SEQs
		SKILL • Evaluate the effects of aging in periodontium of elderly patients • Relate the effect of aging on the progression of periodontal disease	Clinical rotation/SGD/ Lab	OSPE/OSCE

		ATTITUDE: • Time management • Problem Solving • Attendance • Active listening	Clinical rotation/SGD/ Lab	OSPE/OSCE
3	**Classification of periodontal disease**	**KNOWLEDGE** • Describe the Classification of periodontal and gingival disease • Discuss the types of periodontitis according to 2017 classification. • Discuss periodontitis associated with endodontic lesion.	Interactive Lecture/SGD	MCQs/SAQs
		SKILL • Identification of different periodontal diseases clinically • Clinical evaluation of patient	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE: • Problem Solving • Attendance • Active listening	Clinical rotation/SGD/ Lab	OSPE/OSCE
4	**Periodontal microbiology**	**KNOWLEDGE** **INTEGRATION WITH GENERAL PATHOLOGY(MICROBIOLOGY)** • Describe characteristics of biofilm bacteria. • Describe host-microbe interaction • Recognize which bacteria are present in the oral cavity as commensals • Differentiate micro-organisms responsible for various diseases • Recognize which non-bacterial organisms are present in the oral cavity	Interactive Lecture/SGD	MCQs/SEQs

		SKILL • Different techniques to identify plaque in oral cavity • Differentiate between plaque and other dental deposits	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE
5	**The role of dental calculus and other local predisposing factors**	**KNOWLEDGE** • Describe composition of calculus and its attachment to the tooth surface. • Discuss etiological significance of Materia alba, food debris and dental stains. • Identify predisposing factors leading to periodontal diseases.	Interactive Lecture/SGD	MCQs/SEQs
		SKILL • Identify supra-gingival and sub gingival calculus in oral cavity • Differentiate between supra-gingival and sub gingival calculus	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Cross Infection control	Clinical rotation/SGD/ Lab	OSPE/OSCE

6	**Gingival Inflammation**	**KNOWEDGE** • Outline course and duration of gingivitis. • Discuss stages of gingivitis. • Compare and contrast the clinical features and representation of various stages of gingival inflammation.	Interactive Lecture/SGD	MCQs/SEQs
		SKILL • Identify the clinical features of gingival inflammation • Diagnose gingival inflammation clinically • Propose clinical management • Cross infection control	Interactive Lecture/SGD	MCQs/SEQs
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE
7	**Cross Infection Control**	**KNOWLEDGE** • Describe sterilization/disinfection technique for specific instrument • Outline the use of barrier technique (surface covering) to all areas being touched during procedure • Describe the safe practice of sharps disposal and biohazard disposal	Interactive Lecture/SGD	MCQS/SEQS
		SKILL • To maintain a neat and clean working area in the clinic • Practice the hand hygiene maintenance and proper gloving technique	Clinical rotation/SGD/ Lab	OSPE/OSCE

		• Practice the use of personnel protective equipment (mask, eye wear, gowns, face shields, closed shoes)		
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management Attentive listening	Clinical rotation/SGD/ Lab	OSPE/OSCE
8	**Pathogenesis of Periodontal Disease**	**KNOWLEDGE:** • Describe pathogenesis of periodontal disease. • Understand the mechanism of pocket formation. • Discuss systemic administration of antibiotics • Explain rationale of serial and combination antibiotic therapy. • Enlist Locally and Systemically Administered Host Modulatory Agents.	Interactive lecture/ SGD	MCQs/SEQs
		SKILL • Classify types of gingival pockets. • Explain distinguishing features of supra-bony and infra-bony pockets.	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE

9	**Periodontitis**	**KNOWLEDGE** • Describe the general characteristics, distribution, severity of periodontitis. • Describe pathogenesis of Periodontitis. • Describe non-surgical and surgical management.	Interactive lecture/SGD	MCQs/SEQs
		SKILL • Evaluate signs and symptoms of Periodontists. • Differentiate clinical and radiographic presentation. • Perform Non-surgical management of periodontitis •	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE
10	**Oral Hygiene Instructions**	**KNOWLEDGE** • Describe different oral hygiene maintaining aids. • Describe different brushing techniques • Explain the rationale use of mouthwashes if indicated. • Analyse the Prescription of appropriate medicines if required	Interactive lecture/SGD	MCQs/SEQs
		SKILL • Demonstrate the method of brushing appropriate for the patient • Brief the patient on use of adjunctive aides (dental floss, inter dental brush, single tufted brush) if indicated	Clinical rotation/SGD/ Lab	OSPE/OSCE

		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE
11	**Necrotizing Periodontal Diseases**	**KNOWLEDGE** **INTEGRATION WITH ORAL MEDICINE** • Describe necrotizing ulcerative diseases • Describe the etiological factors involved • Describe the management of necrotizing periodontal diseases	Interactive lecture/SGD	MCQs/SAQs
		SKILL • Differentiate necrotizing ulcerative periodontitis from NUG • Management of Necrotising periodontal diseases • Cross Infection Control	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE
12	**Diagnosis of gingival/Periodontal disease**	**KNOWLEDGE:** • Describe the diagnosis of gingival and periodontal diseases according to 2017 periodontal classification • Interpret radiographic findings of different periodontal conditions	Interactive lecture/SGD	MCQS/SEQS

		• List out the crucial risk factors affecting periodontal diagnosis		
		SKILL • Perform detailed clinical periodontal examination • Record periodontal charting (pocket depths, bleeding on probing, recession etc.) • Justify the periodontal diagnosis on the basis of clinical and radiographic findings	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE
13	**Treatment plan**	**KNOWLEDGE** • Design a proper treatment plan for the patient covering all the disciplines. • Plan procedures to be done in corrective phase and assess the need of surgical intervention when needed • Propose how and when to keep the patient on regular follow up and motivated	Interactive lecture/SGD	MCQS/SEQS
		SKILL • Carry out patient education and motivation. • Identify the emergency situations that needs to be addressed before the periodontal treatment • Cross Infection Control	Clinical rotation/SGD/ Lab	OSPE/OSCE

		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE
14	**Gingival Enlargement**	**KNOWLEDGE** **INTEGRAION WITH ORAL PATHOLOGY** • Describe different types of gingival enlargement • Discuss histopathological features • Identify Etiological factors • Describe non-surgical treatment options for different types of gingival enlargement	Interactive lecture/SGD	MCQS/SEQS
		SKILL • Describe criteria for location and distribution of gingival enlargement • Assess how to score for degree of gingival enlargement • Non-surgical management for gingival enlargement • Cross Infection Control	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE
15	**Periodontal maintenance**	**KNOWLEDGE** • Describe periodontal treatment plan • Identify the importance of periodontal maintenance	Interactive lecture/SGD	MCQS/SEQS

		SKILL • Perform periodontal examination • Evaluate the health of periodontium • Cross infection control	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE
16	**Dentine hypersensitivity**	**KNOWLEDGE** **INTEGRATION WITH COMMUNITY DENTISTRY** • Describe the causes of dentin hypersensitivity • Enumerate investigations to reach definitive diagnosis • Outline the Plan of management of patients with dentin hypersensitivity • Select appropriate treatment from a conservative-to-surgical spectrum	Interactive lecture/SGD	MCQS/SAQS
		SKILL • Management of dentinal hyper sensitivity • Non-surgical periodontal therapy • Cross infection control • Oral Hygiene instructions	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE

17	**Bone loss pattern and**	**KNOWLEDGE** • Describe different mechanisms of bone destruction • Describe factors determining bone morphology in periodontal diseases • Describe radiological interpretation • Describe non-surgical and surgical management of bone defects •	Interactive Lecture/SGD	MCQS/SEQS
		SKILL • Clinically identify different patterns of bone destruction in Periodontal Disease • Radiographically identify different patterns of bone destruction in Periodontal Disease • Cross infection control	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE
18	**Furcation Involvement**	**KNOWLEDGE** • Understanding etiology, and diagnosis of furcation involvement • Enlist local anatomic factors involve in furcation involvement • Outline the Classification and Grading of furcation involvement • Discuss non-surgical and surgical treatment plan for different grades of furcation involved teeth	Interactive Lecture/SGD	MCQS/SEQS

		SKILL • Clinical evaluation of furcation involvement • Grading of furcation involvement • Non-surgical management of furcation involvement • Cross infection control	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE
19	**Prognosis**	**KNOWLEDGE** • Define prognosis • Determine the classification of prognosis • Relation of prognosis with treatment planning • Formulate prognosis for each individual tooth according to given classifications	Interactive Lecture/SGD	MCQS/SEQS
		SKILL • Perform periodontal examination to formulate the prognosis • Cross infection control • Radiographic interpretation	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management • Attentive listening	Clinical rotation/SGD/ Lab	OSPE/OSCE

20	**Treatment plan**	**KNOWLEDGE** • Formulate an emergency phase treatment plan • Determine treatment for patients chief complain • Plan procedures needed to correct the patient's oral status (Corrective phase) • Propose how to keep the patient on follow up calls and to complete follow up visits (Maintenance phase)	Interactive Lecture/SGD	MCQS/SEQS
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management • Attentive listening	Clinical rotation/SGD/ Lab	OSPE/OSCE
21	**Periodontal Surgical Therapy**	**KNOELEDGE** • Describe the objectives of periodontal surgery • Describe the rationale of periodontal surgery • Describe the indications and contraindications of periodontal surgical therapy • Describe common surgical procedure/techniques in periodontology • Understanding of general principles of periodontal surgery	Interactive Lecture/SGD	MCQS/SEQS
		SKILL • Non-surgical therapy to prepare the periodontium for surgical procedure • Cross Infection Control	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management	Clinical rotation/SGD/ Lab	OSPE/OSCE

		• Attentive listening		
22	**Halitosis**	**KNOWLEDGE** • Define halitosis • Describe socio economic impact of halitosis • Classification of halitosis • Identify cause of halitosis • Explain the impact of periodontal infection on halitosis	Interactive Lecture	MCQS/SAQS
		SKILL • Diagnostic tests for halitosis • Periodontal management of halitosis • Oral hygiene instructions	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management • Attentive listening	Clinical rotation/SGD/ Lab	OSPE/OSCE
23	**Perio-Restorative**	**INTEGRATION WITH PROSTHODONTICS** **KNOWLEDGE** • Describe the preparation of periodontium for restorative dentistry • Explain biologic considerations and aesthetic tissue management • Describe supracrestal attachment • Describe biological width violation • Crown lengthening (indications/ contraindications), Orthodontic extrusion	Interactive Lecture/SGD	MCQS/SEQS

		SKILL • Identification of supracrestal attachment • Preparation of Periodontium for restorative • Cross infection control	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management • Attentive listening	Clinical rotation/SGD/ Lab	OSPE/OSCE
24	**Abscess and Perio-endo lesions**	**INTEGRATION WITH OPERATIVE DENTISTRY** **KNOELEDGE** • Describe classification of abscesses • Compare and contrast the sign and symptoms of periodontal abscess • Describe differential diagnosis of periodontal and pulpal abscess • Enlist management options for periodontal abscess	Interactive Lecture/SGD	MCQS/SEQS
		SKILL • Evaluation of sign and symptoms of periapical abscess • Evaluation of sign and symptoms of periodontal abscess • Diagnosis/investigations required for diagnosis	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management • Attentive listening	Clinical rotation/SGD/ Lab	OSPE/OSCE

25	**Dental implants**	• Define dental implants, Osseo integration and its importance and peri-implant anatomy • Discuss clinical evaluation and diagnostic imaging for implant patient • Recognize different types of incision and flap designs for basic implant surgical procedures • Recognize bone grafting procedure for localized bone augmentation and implant site development	Interactive Lecture	MCQS/SEQS
26	**Relationship between periodontal disease and systemic health**	**KNOWLEDGE** • Describe diabetes mellitus • Explain complications of diabetes mellitus • Describe the mechanism of interaction between diabetes and periodontal tissues • Explain the effect of Periodontal disease on CVS • Discuss factors affecting blood viscosity due to periodontal infection • Discuss relationship of periodontal disease with rheumatoid arthritis • Describe the effect of pregnancy on periodontium and dental health • Describe relationship of periodontal disease with respiratory diseases	Interactive Lecture/SGD	MCQS/SEQS
		SKILL • Relate the clinical presentation of patient with diabetes mellitus • Identify and evaluate pregnancy epulis • Predict treatment plan for diabetes patient • Perform non-surgical treatment for the improvement of periodontal condition	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour	Clinical rotation/SGD/ Lab	OSPE/OSCE

		• Time management • Attentive listening		
27	**Trauma from Occlusion**	**KNOWLEDGE** • Describe trauma from occlusion. • Differentiate primary trauma from secondary trauma. • Compare acute and chronic trauma. • Explain pathological tooth migration. • Formulate a treatment plan for trauma from occlusion.	Interactive Lecture/SGD	MCQS/SEQS
		SKILL • Differentiate primary trauma from secondary trauma. • Analyze clinical and radiographic signs of trauma from occlusion.	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management • Attentive listening	Clinical rotation/SGD/ Lab	OSPE/OSCE
28	**Perio-smoking**	**KNOWLEDGE** • Describe the effects of smoking. • Recognize smoking as risk factor of periodontal disease. • Discuss effect of smoking on etiology and pathogenesis of periodontal disease. • Construct the periodontal treatment plan. • Assess the effect of smoking cessation on periodontal treatment outcome	Interactive Lecture/SGD	MCQS/SAQS

		• Construct the periodontal treatment plan		
		SKILL • Relate clinical presentation of a smoker with non-smoker • Smoking cessation program • Non-surgical Periodontal therapy • Oral hygiene instructions	Clinical rotation/SGD/ Lab	OSPE/OSCE
		ATTITUDE • Patient Communication • Empathetic behaviour • Time management • Attentive listening	Clinical rotation/SGD/ Lab	OSPE/OSCE

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CLINICAL DEMONSTRATIONS/COMPETANCIES

Clinical Demonstrations Topics list

Departmental orientation will be carried out on first day of rotation for each batch		
S:No:	Topic	Facilitator
01	Dental Unit Preparation & Cross Infection Control	Dr. Iftikhar Ahsen
02	Chair Positioning & ergonomics	Faculty 2
03	History & Clinical Examination	Dr. Iftikhar Ahsen
04	Periodontal Charting	Faculty 2
05	Basic Periodontal Examination	Dr. Iftikhar Ahsen
07	Periodontal Diagnosis and treatment planning (simple cases)	Faculty 2
08	Periodontal Diagnosis and treatment planning (complex cases)	Faculty 2
09	Manual Instrumentation	Dr. Iftikhar Ahsen
10	Powered Instrumentation	Dr. Iftikhar Ahsen

Small Group Discussion Topic List

Departmental orientation will be carried out on first day of rotation for each batch		
S:No:	Topic	Facilitator
01	Introduction & Communication skills	Dr. Iftikhar Ahsen
02	Periodontology logbook filling	Dr. Iftikhar Ahsen
03	Oral Hygiene Instructions	Faculty 2
04	Prognosis	Faculty 2
05	Treatment planning	Dr. Iftikhar Ahsen

06	Referral letter	Faculty 2

INTEGRATED TEACHING

Sub	**GENERAL PATHOLOGY (MICROBIOLOGY)**	**Oral Biology**	**Oral Medicine**	**Prosthodontics**
Topic	Perio-Microbiology	Anatomy of Periodontium	Necrotizing Periodontal Diseases	Perio-Restorative Interface
SLOs	• Describe characteristics of biofilm bacteria. • Describe host-microbe interaction • Recognize	• Compare and contrast the clinical features and microscopic features of periodontium • Identify and understand the development of attachment apparatus	• Identify and describe necrotizing ulcerative diseases • Identify the etiological factors involved • Differentiate necrotizing ulcerative	• Discuss fixed prosthesis consideration and preparation of periodontium for restorative dentistry • Explain biologic conside

	commensals • Differentiate micro-organisms responsible for various diseases Recognize which non-bacterial organisms are present in the oral cavity		periodontitis from NUG • Management of Necrotising periodontal diseases	rations and aesthetic tissue management
Subject		**Community Dentistry**	**Oral Pathology**	**Operative Dentistry**
Topic		Dentinal Hypersensitivity	Gingival Enlargement	Abscess and Perio-endo lesions
SLOs		• Describe the causes of dentin hypersensitivity • Outline the Plan of management of patients with dentin hypersensitivity	• Identify different types of gingival enlargement • Discuss histopathological features • Identify Etiological factors	• Enlist classification of abscesses • Compare and contrast the sign and symptoms of periodontal abscess • Describe differential diagnosis of periodontal and pulpal abscess

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ASSESMENT: MARKS DISTRIBUTION

Theory	**Number**	**Marks**	**Total**
MCQs	45	01	45
SEQs	15	03	45
Internal Assessment	-	10	10
Total			100

Practical	**Marks**	**Total**
Viva	45 25 marks external examiner, 20 marks internal examiner	45
Clinical Exam	45	45
Internal Assessment	10	10
Total		100

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LEARNING RESOURCE

- Carranza's Clinical Periodontology 13th Edition
- Carranza's Clinical Periodontology 14th Edition (if available)
- Clinical Periodontology and Implantology 6th Edition by Jan Lindhe and Niklaus Lang
- Colour Atlas of Clinical Surgical Periodontology by Strahan & White
- A text book of clinical periodontology by Jan Lindhe
- Fundamentals of Periodontics by Thomas G Wilson, Kenneths Komman

Clinics / Practical	Students will be involved in clinical work in the periodontology clinic
Videos	Video familiarize the student with the procedures and protocols to treat patients.
Computer Lab/CSs/DVDs/ Internet **Resources:**	To increase the knowledge, students should utilize the available internet resources and CDs/ DVDs. This will be an additional advantage to increase learning.
Self-Learning	Self-Learning is scheduled to search for information to solve cases, read through different resources and discuss among the peers and with the faculty to clarify the concepts.

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RAHBAR COLLEGE
OF DENTISTRY

3rd Year BDS, Department of
Oral and Maxillofacial Surgery

RCoD LAHORE

1. WELCOME NOTE BY HEAD OF DEPARTMENT

Welcome to the Department of Maxillofacial Surgery, where science and skill converge to shape futures. As you step into this rigorous and rewarding field, prepare to challenge yourself like never before. From intricate facial reconstructions to life-changing trauma surgeries, you'll be learning techniques that require both precision and creativity. Our faculty, a group of experts with vast clinical experience and a passion for teaching, will push you to think critically, act decisively, and always strive for excellence. This is more than a department—it's a community where you'll grow not just as a surgeon, but as a person ready to make an impact.

2. RATIONALE FOR THE COURSE

Dental problems in Pakistan significantly impact oral and maxillofacial health. Patients from regions in the periphery suffer from limited dental resources and a lack of trained professionals, contributing to untreated conditions. By the time has significantly upstaged and progressed. In order to improve the current situation, it is crucial to enhance public awareness of importance of oral hygiene, screening for oral cancer to facilitate early detection and timely referral and public awareness for road safety. Addressing these challenges is essential for better oral health outcomes and reducing the burden of surgical issues.

Maxillofacial Surgeons play a crucial role in managing trauma from accidents or inter-personal violence, pathology including cysts and oral cancer, surgical extractions of impacted 3rd molars, extractions due to non restorable dental caries and periodontal disease, cleft lip and palate related procedures, orthognathic surgery for managing severe malocclusion and maxillofacial deformity.

With rising awareness and demand for surgical services, the field is expanding, supported by advancements in technology and techniques. However, there is a need for more specialized training programs to enhance health care professionals' skills. Overall, maxillofacial surgery significantly contributes to public health thereby improving patients' quality of life.

In order to enhance students' grasp over the subject, the Oral & Maxillofacial Surgery department promotes innovative teaching methodologies like case and problem based learning, flipped classroom, peer teaching and reflective learning.

Various support options for improving students' comfort and performance are available. These include faculty mentorship program, hands-on supervised training, research facilities, community service programs, peer supported study groups, library access, conferences, workshops, continuous feedback mechanism, learning management system and mental health support.

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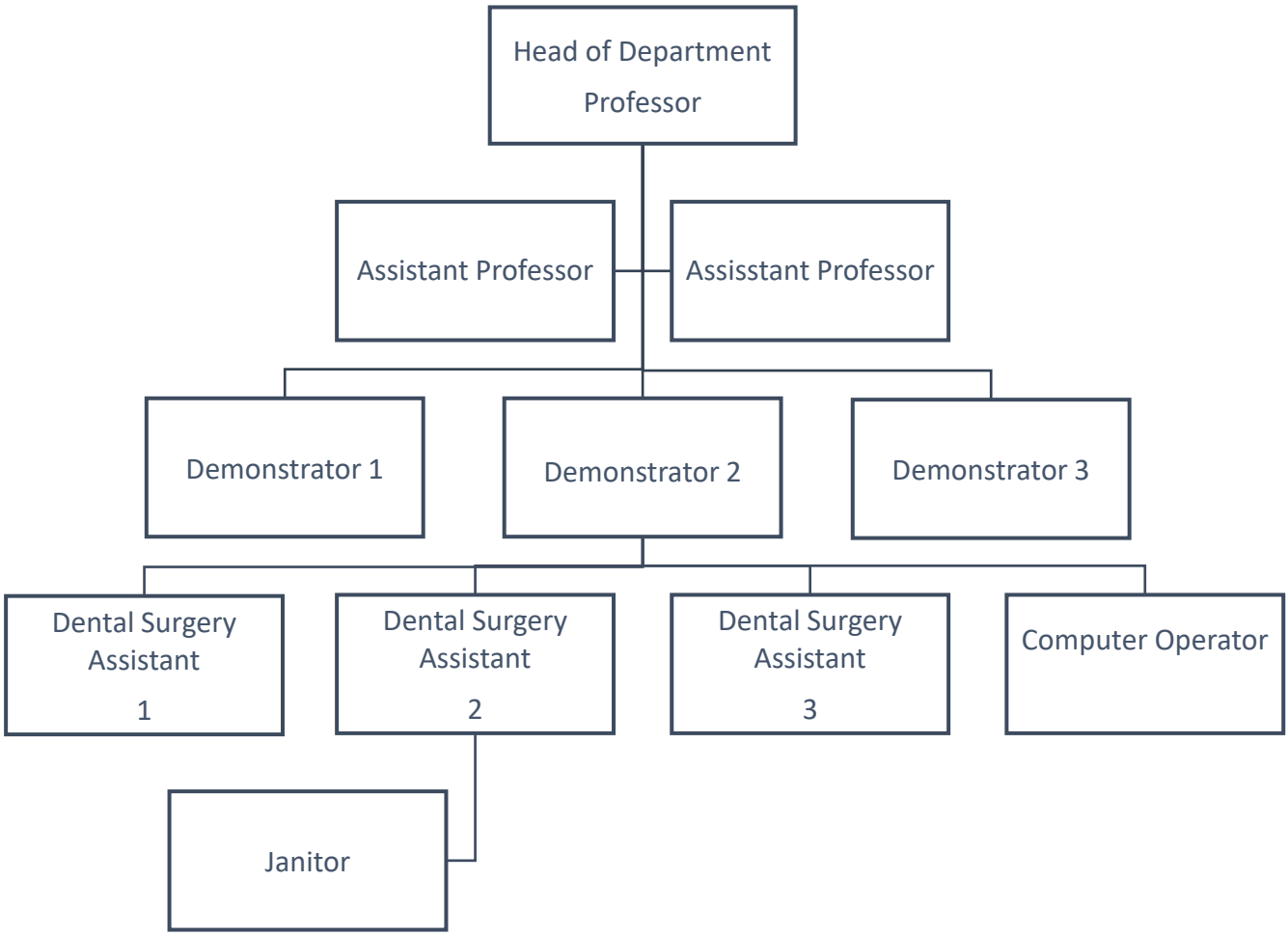
3. DEPARTMENTAL DETAILS

Course Director		
Prof Dr Ashfaq Ur Rahim	BDS, FCPS, CMT, FAOCMF (UK)	Head of Department Professor
Contributors		
Brig. (R) Dr Babar Pasha	BDS, MCPS, FCPS, CHPE	Assistant Professor
Dr Bushra Mazhar	BDS, MFD RCSI, FCPS	Senior Registrar
Co-Contributors:		
Dr Vaffa Shahid Khan	BDS	Demonstrator
Dr Fatima Wasif	BDS	Demonstrator
Br Bareerah Idrees	BDS	Demonstrator

Small Group Discussion Sessions (7 weeks)	4
Clinical Demonstrations (7 weeks)	5

4. DEPARTMENTAL ORGANOGRAM
ORAL AND MAXILLOFACIAL SURGERY

DEPARTMENTAL ORGANOGRAM
ORAL AND MAXILLOFACIAL SURGERY



RCoD LAHORE

5. COURSE INSTRUCTORS

COURSE INSTRUCTORS

Sr no.	Name	Designation
1.	Prof Ashfaq Ur Rahim	Professor & HOD
2.	Brig (R) Dr Babar Pasha	Assistant Professor
3.	Dr Bushra Mazhar	Assistant Professor

RCoD LAHORE

6. CLINICAL ROTATION PLAN

CLINICAL DEMONSTRATION

Venue: Skills Laboratory

DAY 1	**ORIENTATION DAY**			
WEEK	**Day**	**Time**	**Demonstration Topic**	**Instructor**
WEEK 1	Thursday	01:00 pm - 02:00 pm	Tray Setup for exodontia & patient positioning	Dr Bushra Mazhar
WEEK 2	Thursday	01:00 pm - 02:00 pm	Local anesthesia: 1. Armamentarium 2. Technique for buccal infiltration, greater palatine nerve block and long buccal nerve block	Brig (R) Babar Pasha
WEEK 3	Thursday	01:00 pm - 02:00 pm	Local anesthesia: Technique for inferior alveolar nerve block	Prof Ashfaq Ur Rahim
WEEK 4	Thursday	01:00 pm - 02:00 pm	Armamentarium for exodontia	Dr Bushra Mazhar
WEEK 5	Thursday	01:00 pm - 02:00 pm	Incision and suturing exercise: 1. Simple interrupted 2. Figure of 8	Brig (R) Babar Pasha
WEEK 7	**CLINICAL TEST**			

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SMALL GROUP DISCUSSION

Venue: SGD Room No. 3

DAY 1	ORIENTATION DAY			
WEEK	**Day**	**Time**	**Topics**	**Instructor**
WEEK 1	Wednesday	01:00 pm - 02:00 pm	OMFS patient evaluation for exodontia	Brig (R) Babar Pasha
WEEK 2	Wednesday	01:00 pm - 02:00 pm	Post-operative instructions following exodontia	Dr Bushra Mazhar
WEEK 3	Wednesday	01:00 pm - 02:00 pm	Filling a biopsy form	Brig (R) Babar Pasha
Week 4	Wednesday	01:00 pm - 02:00 pm	Referral Letter writing	Prof Ashfaq Ur Rahim
WEEK 7	CLINICAL TEST			

FACULTY DUTY ROSTER FOR CLINICAL ROTATION

RCoD LAHORE

FACULTY DUTY ROSTER FOR CLINICAL ROTATION

ORAL AND MAXILLOFACIAL SURGERY

DAY	**Third YeaR BDS** **CLINICAL SUPERVISION** **10:15am-2:00pm**
Mon	Prof Ashfaq Ur Rahim Brig (R) Babar Pasha Dr Bushra Mazhar Dr Fatima Wasif
Tues	Prof Ashfaq Ur Rahim Brig(R) Babar Pasha Dr Bareerah Idrees Dr Vaffa Shahid
Wed	Prof Ashfaq Ur Rahim / Brig (R) Babar Pasha Dr Vaffa Shahid Dr Bushra Mazhar
Thurs	Prof Ashfaq Ur Rahim Brig(R) Babar Pasha Dr Bushra Mazhar Dr Bareerah Idrees
Fri	Prof Ashfaq Ur Rahim Dr Bushra Mazhar Dr Vaffa Shahid Dr Fatima Wasif

7. LEARNING RESOURCES

Textbooks:

- Contemporary Oral & Maxillofacial Surgery by James R. Hupp, Edward Ellis III, Myron R. Tucker. 7th Edition. 2019.
- Handbook of Local Anesthesia by Stanley F. Malamed. 7th Edition. 2020.
- Killey's Fractures of the Mandible by Peter Banks and H. C. Killey. 4th Edition. 1991.
- Killey's Fractures of the Middle Third of Facial Skeleton by H. C. Killey and Peter Banks. 4th Edition. 1987.

Reference Books:

- Peterson's Principles of Oral and Maxillofacial Surgery by Michael Miloro, G. E. Ghali, Peter E. Larsen, Peter Waite. 4th Edition, 2022.
- Maxillofacial Surgery by Peter A. Brenan, Henning Schliephake, G. E. Ghali, Luke Cascarini. 3rd Edition, 2017.
- Operative Oral and Maxillofacial Surgery by John Langdon, Mohan Patel, Robert Ord, Peter Brennan. 2nd Edition, 2009.

RAHBAR COLLEGE
OF DENTISTRY

OPERATIVE DENTISTRY

STUDY GUIDE

3rd YEAR BDS

1. WELCOME NOTE BY HEAD OF DEPARTMENT

Welcome to the exciting journey in Department of Operative Dentistry! Our department is dedicated to providing you with the knowledge, hands-on experience, and mentorship needed to excel. Take full advantage of our state-of-the-art facilities, expert faculty, and clinical opportunities. Here, you will find essential resources, key concepts, and practical insights that will enhance your knowledge in the subject of Preclinical Operative Dentistry. We aim to provide you with clear, structured content that complements your classroom learning and prepares you for both exams and future clinical practice. We are here to support you in every step of this journey.

2. RATIONALE FOR THE COURSE/ DEPARTMENT

Overview of Operative Dentistry related Dental Problems in Pakistan

In Pakistan, dental issues like caries, periodontal disease, and endodontic infections are widespread, largely due to poor oral hygiene, sugary diets, and limited access to care, especially in rural areas. Dental caries is the most common, leading to a high demand for restorative treatments. Root canal infections often result from untreated cavities, while non-carious cervical lesions are increasing due to improper brushing and stress. Cosmetic dentistry is gaining popularity in urban areas. However,

public awareness about preventive care remains low, and access to quality treatment is limited, underscoring the need for better education and healthcare resources.

Course Significance and Scope

Operative dentistry is a crucial part of dental education, providing students with the skills to diagnose, prevent, and treat common dental issues like caries, trauma, and endodontic infections. The scope includes restorative procedures like fillings, crowns, veneers, and root canal treatments, along with preventive care to maintain oral health. This field also covers aesthetic dentistry, focusing on improving the appearance of teeth. Overall, Operative dentistry equips students with essential skills to provide comprehensive functional and aesthetic dental care.

Co-Relation of non clinical subjects with Operative Dentistry

Non-clinical subjects are crucial to operative dentistry, providing the foundational knowledge necessary for effective treatment. **Dental anatomy and histology** help in understanding tooth structures, essential for cavity preparation and restorations. **Biochemistry** and **microbiology** inform caries management and infection control, while **pathology** aids in diagnosing diseases affecting oral tissues. **Pharmacology** is vital for using anesthetics and antibiotics during procedures, **dental materials** knowledge ensures the correct use of restorative materials while **behavioral sciences** improve patient communication and care. Together, these subjects enhance clinical skills in operative dentistry.

Innovative Student Centered Teaching Methods

Information transfer methods will include classroom teaching, hands-on exercises, video demonstrations, small group discussions, case-based learning, and role plays. Educational approaches encompass interactive lectures, collaborative learning, self-study, and tutorials. Cognitive objectives focus on engaging discussions and demonstrations, while psychomotor objectives emphasize clinical skills and patient handling, enhancing affective learning through peer interactions.

Support options for students

Support options for students in Operative Dentistry include well-equipped **clinic**, **simulation labs**, and **research facilities** to enhance hands-on learning and innovation. **Faculty support** through mentorship, dedicated office hours for tutoring, and interdisciplinary collaboration fosters personalized learning. **Clinical experience opportunities**, such as hands-on training and community service, provide practical exposure. **Peer support networks**, including study groups and organizations, promote teamwork, while **academic resources** like libraries and workshops enrich learning. **Continuous feedback** and **wellness services** ensure students' progress and well-being throughout their education.

3. DEPARTMENTAL DETAILS

ad of department	**of. Dr. Muhammad Nasir Saleem**
udy Guide developed by	**of. Dr. Muhammad Nasir Saleem Dr. Hira Anjum**
nical Demonstrations	6 for every 7 weeks clinical rotation
Ds	6 for every 7 weeks clinical rotation

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COURSE DIRECTOR:

Prof. Dr. Muhammad Nasir Saleem	BDS,FCPS,MSc,ICMT,FDS RCPSG,PhD(Scholar)	Principal & Head of Department

CONTRIBUTORS:

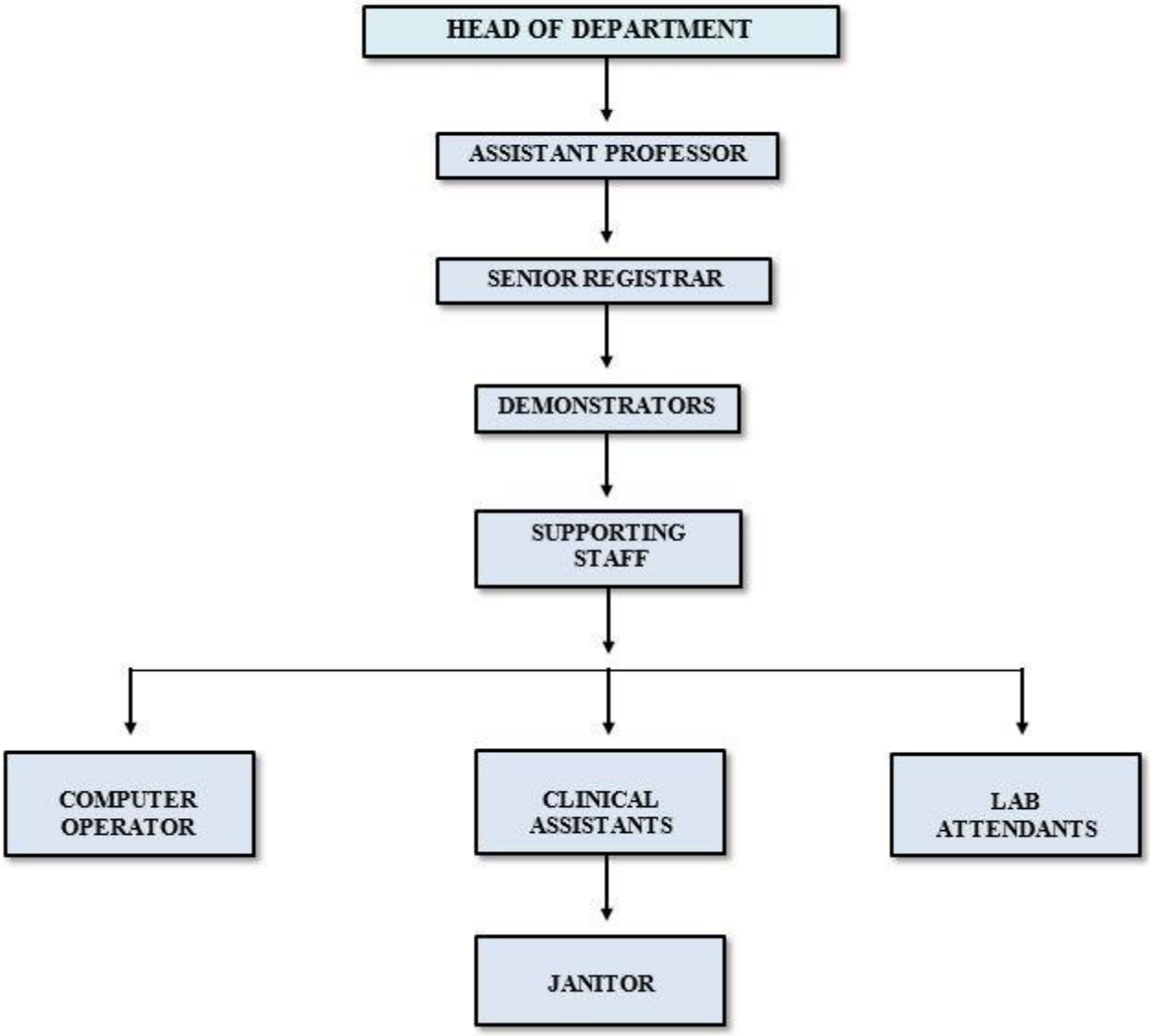
Dr. Hira Anjum	BDS,FCPS	Assistant Professor
Dr. Hira Imtiaz	BDS,FCPS	Senior Registrar

CO-CONTRIBUTORS:

Dr. Huda Mahmood	BDS	Demonstrator
Dr. Saadia Ahmad Chattha	BDS	Demonstrator

DEPARTMENT OF OPERATIVE DENTISTRY

DEPARTMENTAL ORGANOGRAM



5. COURSE INSTRUCTORS

no.	me	signation
3.	of. Dr. Muhammad Nasir Saleem	ofessor
4.	. Hira Anjum	sistant Professor
5.	. Hira Imtiaz	nior Registrar

6. CLINICAL ROTATION PLAN

RCoD LAHORE

DISCUSSION TOPICS

1. Introduction to root canal (Basic Armamentarium)
2. Pulpal and Periradicular Diseases
3. Pulp Space Anatomy
4. Access cavity designs
5. Irrigants & Intra canal Medicaments
6. Obturation

DAY 1	**ORIENTATION DAY**			
WEEK	**Day**	**Time**	**Topics**	**Instructor**
WEEK 1	Wednesday	2:00pm-3:00pm	**SGD-** Introduction to root canal (Basic Armamentarium)	Prof. Dr. Nasir Saleem
WEEK 2	Wednesday	2:00pm-3:00pm	**SGD-**Pulpal and Periradicular Diseases	Dr. Hira Anjum
WEEK 3	Wednesday	2:00pm-3:00pm	**SGD-** Pulp Space Anatomy	Dr. Hira Imtiaz
WEEK 4	Wednesday	2:00pm-3:00pm	**SGD-** Access cavity designs	Prof. Dr. Nasir Saleem
WEEK 5	Wednesday	2:00pm-3:00pm	**SGD-** Irrigants & Intra canal Medicaments	Dr. Hira Anjum
WEEK 6	Wednesday	2:00pm-3:00pm	**SGD-**Obturation	Dr. Hira Imtiaz
WEEK 7	**CLINICAL TEST**			

CLINICAL DEMONSTRATION

DEMONSTRATION TOPICS:

1. Isolation- Rubber Dam Application (Anterior)
2. Isolation- Rubber Dam Application (Posterior)
3. Non-Surgical Endodontic Therapy (Access Opening)
4. Non-Surgical Endodontic Therapy (Canal Preparation)
5. Non-Surgical Endodontic Therapy (Obturation)
6. Restoration of Endodontically Treated Teeth

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DAY 1	**ORIENTATION DAY**			
WEEK	**Day**	**Time**	**Topics**	**Instructor**
WEEK 1	Thursday	2:00pm-3:00pm	**Demonstration** – Isolation (Rubber Dam Application Anterior)	Dr. Hira Imtiaz
WEEK 2	Thursday	2:00pm-3:00pm	**Demonstration** – Isolation (Rubber Dam Application Posterior)	Dr. Hira Imtiaz
WEEK 3	Thursday	2:00pm-3:00pm	**Demonstration** – Non Surgical Endodontic Therapy (Access Opening)	Prof. Dr. Nasir Saleem
WEEK 4	Thursday	2:00pm-3:00pm	**Demonstration** – Non Surgical Endodontic Therapy (Canal Preparation)	Prof. Dr. Nasir Saleem
WEEK 5	Thursday	2:00pm-3:00pm	**Demonstration** – Non Surgical Endodontic Therapy (Obturation)	Dr. Hira Anjum
WEEK 6	Thursday	2:00pm-3:00pm	**Demonstration-** Restoration of Endodontically Treated Teeth	Dr. Hira Anjum
WEEK 7	**CLINICAL TEST**			

FACULTY DUTY ROSTER

3RD YEAR BDS

DAY	**CLINIC** **10:15am-3:00pm**	**SGD/DEMO** **2:00pm-3:00pm**
Wednesday	Dr. Hira Anjum	Dr. Nasir, Dr.Hira Anjum, Dr.Hira Imtiaz
Thursday	Dr. Hira Imtiaz	Dr. Nasir, Dr.Hira Anjum, Dr.Hira Imtiaz

Friday	Prof. Dr. Nasir	

3rd YEAR BDS

Ser.	TOPIC	MIT	LEARNING OUTCOMES	MODE OF ASSESSMENT
1.	Introduction to root canal Basic armamentarium	SGD, Practical	**KNOWLEDGE** Define endodontics Exhibit understanding the basic anatomy of the tooth, including the pulp chamber, root canals, and periapical tissues. Recognize Indications for Root Canal Therapy Identify RCT Instruments and describe the functions of basic armamentarium	OSCE

			used in RCT, such as files, broaches, rubber dams, endodontic explorers, and obturation materials. **SKILL** Demonstrate correct handling and usage of basic RCT instruments under supervision, focusing on instrument control, patient safety, and procedural accuracy.	
2.	Rubber Dam & Isolation, Rubber Dam Application Anterior	SGD, Practical	**KNOWLEDGE** Emphasize the importance of isolation. Identify components of rubber dam. **SKILL** Apply rubber dam on anterior teeth. **ATTITUDE** Prioritize patient safety and comfort by ensuring the rubber dam is applied gently and effectively	OSCE
3.	Rubber Dam Application Posterior	SGD, Practical	**KNOWLEDGE** Discuss isolation techniques. **SKILL** Perform rubber dam isolation for posterior teeth. **ATTITUDE** Prioritize patient safety and comfort by ensuring the rubber dam is applied gently and effectively.	OSCE
4.	RCT Access cavity preparation	SGD, Practical	**KNOWLEDGE** Know the objectives of access opening, including gaining straight-line access to the root canal system, preserving tooth structure, and minimizing complications. Exhibit understanding of the appropriate use of instruments and	OSCE

			materials for access opening, including burs, hand pieces, and magnification tools. **SKILL** Accurately determine the correct working length using appropriate techniques such as electronic apex locators and radiographs. Negotiate uncomplicated root canals. **ATTITUDE** Show a commitment to patient comfort and safety, including effective pain management, clear communication, and minimizing trauma during the procedure.	
5.	RCT Cleaning and Shaping	SGD, Practical	**KNOWLEDGE** Know the various techniques for canal preparation, including manual and rotary instrumentation, and the principles behind each method. Explain the role and proper use of irrigation solutions in canal preparation, including their antimicrobial properties and the importance of maintaining canal patency. **SKILL** Prepare root canals without procedural error in uncomplicated anterior and posterior teeth. Judicially use irrigating agents for root canal irrigation and elimination of microorganisms, organic and inorganic materials. Apply root canal medicaments for the control of microbial infection. **ATTITUDE** Show a strong commitment to patient safety by carefully monitoring for signs of complications, such as file separation or extrusion of irrigants, and taking preventive measures to avoid them.	OSCE
6.	RCT Obturation and	SGD, Practical	**KNOWLEDGE** Enlist the goals of obturation, including the complete sealing of the	OSCE

	Restoration		root canal system to prevent reinfection. Know the different obturation materials (e.g., gutta-percha, sealers) and techniques (e.g., lateral condensation, thermoplasticized methods), along with their indications, advantages, and limitations. Describe the importance of achieving a hermetic seal at both the apical and coronal ends of the canal to ensure the long-term success of the root canal treatment.	
			SKILL Obturate the root canals of uncomplicated anterior and posterior teeth, densely and with length control. Provide appropriate postoperative instructions on mouth care and the management of postoperative pain and swelling	
			ATTITUDE Show a commitment to patient safety by carefully monitoring the obturation process to avoid procedural errors, such as overfilling or underfilling, and by managing any complications that may arise.	

LEARNING RESOURCES

Sr #	Title of Book	Edition
1.	Sturdevant's Art and Science of Operative Dentistry	2nd South Asian Edition
2.	Endodontics: Principles and Practice by Torabinjad. Richard E Walton, MahmoudTorabinjad.	6th edition
3.	Summitt's Fundamentals of Operative Dentistry- A Contemporary Approach	4th Edition

4.	Contemporary fixed prosthodontics by Stephan R. Rosentiel	5th Edition
5.	Paediatric Dentistry by Richard R. Welbury	5th Edition

RAHBAR COLLEGE
OF DENTISTRY

Department of General Surgery

STUDY GUIDE 2026-2027

Third Year BDS

Rahbar College Of Dentistry

Lahore

Author Of Study Guide

DEPARTMENT NAME

General Surgery

HEAD OF DEPARTMENT

RCoD LAHORE

Dr M Siddique

Assistant Professor Of General Surgery

Welcome Note

I am delighted to welcome you all to the Bachelor of Dental Surgery (BDS) program. As you embark on the exciting journey, you are joining a community dedicated to excellence in dental education and patient care. This program is not just about acquiring knowledge; it's about developing skills, fostering compassion and becoming leaders in the field of dentistry. You will face challenges, but each one will shape you into a competent and caring dental professional.

Rahbar College of Dentistry, our Department of General Surgery is equipped to meet the highest standards set by the PM&DC, ensuring that our students receive a comprehensive and hands-on education. We are committed to teaching future dentists about the various diseases affecting the soft and hard tissues of the head and neck. Our curriculum emphasizes the causes, clinical presentations, radiological findings, and histopathological insights, empowering students to diagnose these conditions for effective treatment.

We encourage you to take full advantage of the resources available to you, engage with your peers and faculty, and embrace every opportunity for growth. Together, let's make this an enriching experience.

Wishing you all a successful and fulfilling year ahead.

Warm regards,

Dr Muhammad Siddique

RCoD LAHORE

HOD General Surgery

Assistant Professor

Rahbar College of Dentistry

RCoD LAHORE

INTRODUCTION:

Dear Students,

As you advance into your third year of the Bachelor of Dental Surgery program, your understanding of general surgery will be crucial in integrating dental and medical knowledge. Here are some key points to focus on:

1**. Understanding Surgical Principles**: Familiarize yourself with the basics of surgical techniques, aseptic methods, and the healing process. This foundational knowledge will support your clinical practice.

2**. Common Surgical Procedures**: Review common surgeries relevant to dentistry, such as biopsies, extractions, and minor oral surgeries. Understand the indications, contraindications, and post-operative care.

3. **Anatomy and Physiology**: Deepen your knowledge of head and neck anatomy, as this is vital for dental procedures. Pay special attention to vascular and nerve supply in this region.

4. **Patient Management**: Learn about pre-operative assessments, consent processes, and post-operative care. Good communication with patients is essential for effective management.

5. **Interdisciplinary Collaboration:** Understand the role of collaboration between dental and medical professionals in managing complex cases.

6. **Emergency Situations**: Familiarize yourself with handling surgical emergencies that may arise in dental practice, such as infections or trauma.

7. **Ethics and Professionalism**: Uphold ethical standards in surgery, including patient confidentiality, informed consent, and professional conduct.

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Stay engaged, ask questions, and seek opportunities for hands-on experiences. This will not only enhance your knowledge but also prepare you for your future practice.

Best of luck in your studies!

Sincerely

Dr Muhammad Siddique

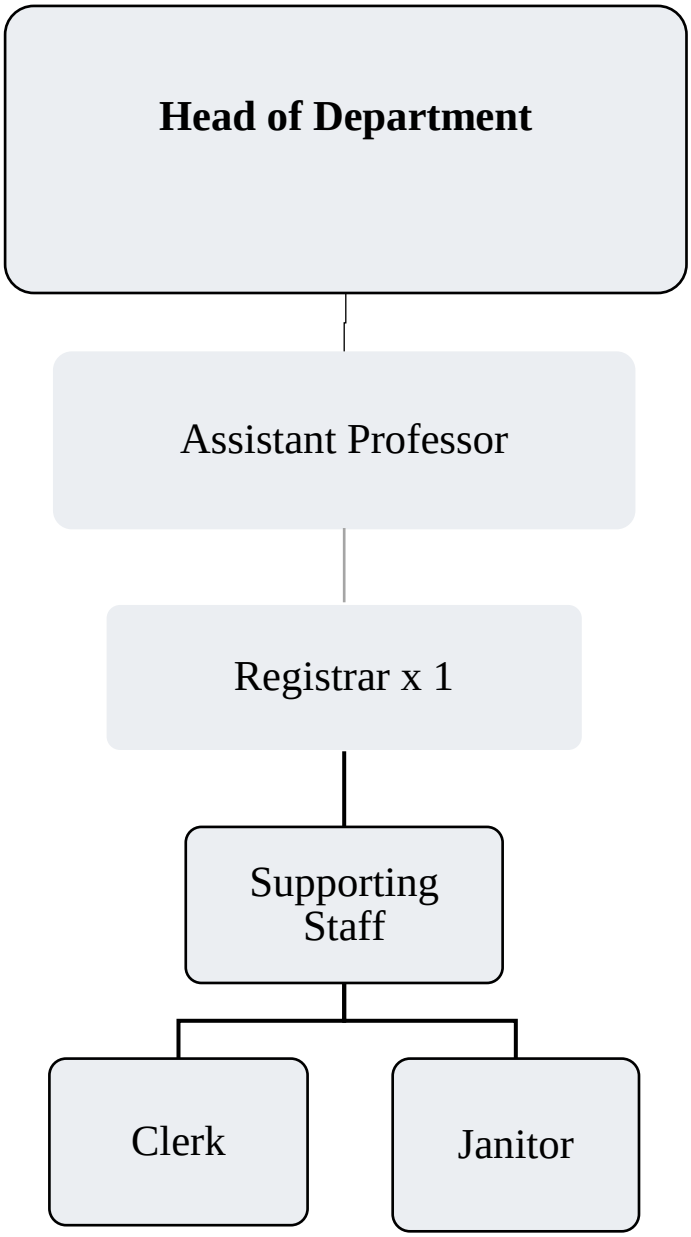
Assistant Professor

General Surgery

RCoD LAHORE

Department of General Surgery

Organogram



General Surgery

Learning Outcome	To identify clinical conditions on basis of history, clinical examination, investigations and plan relevant management and recent advances.		
Topics	**Learning Objectives:** **At the end of the session student should be able to:**	**Mode of Information Transfer**	**Assessment Tool**
Skin and Soft Tissue	KNOWLEDGE • Identify signs and symptoms of various skin and soft tissue conditions including infections, benign and malignant lesions and developmental anomalies. To be able to formulate a plan for management. • Describe the process of wound healing SKILL • Perform a skin assessment, including	Lecture/SGS/Bedside teaching	MCQ/SEQ/Viva

	inspection and palpation. • Identify signs of infection or inflammation in soft tissues. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership		
Traumatology	KNOWLEDGE • Manage a case of trauma and be able to provide effective medical aid to save the life of a patient of: Shock, Burns and Polytrauma. SKILL • Demonstrate the primary survey (ABC: Airway, Breathing, Circulation) and secondary survey. • Assess vital signs and recognize signs of shock (e.g., rapid	Lecture/SGS/Bedside teaching	MCQ/SEQ/Viva

	pulse, low blood pressure). ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership		
Developmental Anomalies of head and neck	KNOWLEDGE • Identify signs/symptoms and be able to diagnose/chalk down investigations and make management plan for various developmental anomalies of head and neck region. SKILL • Perform a physical examination of the head and neck. • Utilize imaging techniques and assessments relevant to identifying anomalies.	Lecture/SGS/Bedside teaching	MCQ/SEQ/Viva

	ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership		
Oral cavity	KNOWLEDGE • Identify and be able to diagnose/chalk down investigations and give management plan for various anomalies of oral cavity, including benign and malignant lesions. SKILL • Perform a thorough oral examination. • Utilize appropriate tools for inspection and palpation. ATTITUDE • Time management • Communication skills • Attendance	Lecture/SGS/Bedside teaching	MCQ/SEQ/Viva

	• Active learning • Problem solving • Leadership		
Salivary glands	KNOWLEDGE • Identify and be able to diagnose/chalk down investigations and give management plan for various anomalies of salivary glands and ducts, including benign and malignant lesions. SKILL • Perform a thorough examination of the salivary glands and ducts. • Use appropriate tools for inspection and palpation. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership	Lecture/SGS/Bedside teaching	MCQ/SEQ/Viva

Thyroid	KNOWLEDGE • Identify signs and symptoms, diagnose, chalk down investigations and give management plan for thyroid disorders. • Identify signs and symptoms, diagnose, chalk down investigations and give management plan for benign and malignant thyroid tumors. SKILL • Perform a physical examination of the thyroid gland. • Use appropriate diagnostic tests (e.g., blood tests, imaging) to assess thyroid function. ATTITUDE • Time management • Communication skills • Attendance • Active learning	Lecture/SGS/Bedside teaching	MCQ/SEQ/Viva

	• Problem solving • Leadership		
Parathyroid glands	KNOWLEDGE • Identify signs and symptoms, diagnose, chalk down investigations and give management plan for parathyroid dysfunctions. SKILL • Perform a physical examination related to parathyroid function. • Use appropriate diagnostic tests (e.g., blood tests, imaging) to assess parathyroid function. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership	Lecture/SGS/ bedside teaching	MCQ/SEQ/Viva

Esophagus	KNOWLEDGE • Identify cases of dysphagia, diagnose, chalk down investigations and give management plan. SKILL • Perform a thorough history-taking relevant to esophageal disorders. • Conduct a focused physical examination related to esophageal issues. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership	Lecture/SGS/ bedside teaching	MCQ/SEQ/Viva
Endocrinology	KNOWLEDGE • Identify signs and symptoms, diagnose, chalk down	Lecture/ SGS/bedside teaching	MCQ/SEQ/Viva

	investigations and give management plan for benign and malignant endocrine disorders. SKILL • Perform a thorough history-taking relevant to endocrine disorders. • Conduct a physical examination focusing on signs related to hormonal imbalances. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership		
Liver and biliary tree	KNOWLEDGE • Describe the functions of liver/biliary tree and identify signs and symptoms to diagnose and chalk down	Lecture/SGS/ bedside teaching	MCQ/SEQ/Viva

	investigations and give management plan for liver/biliary tree disorders. SKILL • Perform a thorough history-taking relevant to liver and biliary disorders. • Conduct a focused physical examination, including liver palpation and assessment of jaundice. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership		
Stomach and duodenum	KNOWLEDGE • Identify signs and symptoms, diagnose, chalk down investigations and give management plan for acute and	Lecture/SGS/bedside teaching	MCQ/SEQ/Viva

	chronic stomach and duodenum diseases. SKILL • Perform a thorough history-taking relevant to stomach and duodenal disorders. • Conduct a focused physical examination, including abdominal palpation. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership		
Intestines	KNOWLEDGE • Identify signs and symptoms, diagnose, chalk down investigations and give management plan for acute and	Lecture/SGS/ bedside teaching	MCQ/SEQ/Viva

	chronic intestines diseases. SKILL • Perform a thorough history-taking relevant to intestinal disorders. • Conduct a focused physical examination, including abdominal assessment and inspection for signs of gastrointestinal issues. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership		
Spleen	KNOWLEDGE • Identify signs and symptoms, diagnose, chalk down investigations and give management plan for clinical	Lecture/SGS bedside teaching	MCQ/SEQ/Viva

	conditions related to spleen. SKILL • Perform a thorough history-taking relevant to spleen disorders. • Conduct a focused physical examination, including abdominal assessment for splenic size and tenderness. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership		
Chest	KNOWLEDGE • Diagnose and manage various acute chest conditions in emergency and outdoor. SKILL	Lecture/SGS/bedside teaching	MCQ/SEQ/Viva

	• Perform a thorough history-taking relevant to chest disorders. • Conduct a focused physical examination, including respiratory and cardiovascular assessments. ATTITUDE • Time management • Communication skills • Attendance • Active learning • Problem solving • Leadership		

Learning Domain **(Psychomotor)**	**Learning Objective** **At the end of the session, students will be able to:**	**Mode of Information Transfer**	**Assessment Tool**
History taking and general physical examination	Develop rapport with the patient and take history along with the general physical examination to identify signs leading to diagnosis.	Ward Lecture/Demonstrations	OSCE

Systemic examination	Perform systemic examination to identify signs leading to diagnosis.	Ward Lecture/Demonstrations	OSCE
IV cannulation	Take IV line in a safe and aseptic manner.	Skill Lab/ Ward Demonstration	OSCE
Applying and removing sutures	Perform aseptic application and aseptic removal of skin sutures, and handling of instruments	Skill Lab/ Ward	OSCE
Nasogastric tube placement	Take consent, counsel and perform intubation effectively and check positioning.	Skill Lab/Ward	OSCE
Foley's catheterization	Take informed consent and counsel the patient and catheterize patients aseptically and safely.	Skill Lab/Ward	OSCE
Principles of aseptic dressing and wound care	Describe the class of wound and principles of aseptic dressing to be applied.	Skill Lab/Ward	OSCE

Learning Domain **(Affective Domain)**	**Learning Objective** **At the end of the session, students will be able to:**	**Mode of information transfer**	**Assessment tool**
Ethics & Justice	Demonstrate empathy to the patient and respect their feelings and emotions and social needs and council patient effectively	Role modelling, Group discussion, Bedside teaching.	Observational
Consent for Exam & Test			Observational
Empathy & Respect Including Privacy			Observational
Autonomy & Confidentiality			Observational

Counselling			Observational

Recommended Books:

Bailey and Love short practice of Surgery edition 28th

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