

JINNAH MEDICAL AND DENTAL COLLEGE

ORAL MEDICINE

DEPARTMENTAL GUIDE BOOK FOR THIRD YEAR
STUDENTS



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INTRODUCTION

VISION STATEMENT: To set local and global standards for quality patient outcomes – creating a culture of excellence to promote a transformative experience for the 21st century clinicians, educators and researchers to benefit all humanity.

MISSION STATEMENT: We are committed to develop well rounded academics, thinkers, clinicians and researchers by strengthening a global view, broadening intellectual foundation and teaching effective communication. It is our aspiration to cultivate creative and critical thinking skills for problem solving, sensitive to cultural and ethical values and responsibilities. Our graduates will be role models and leaders for society.

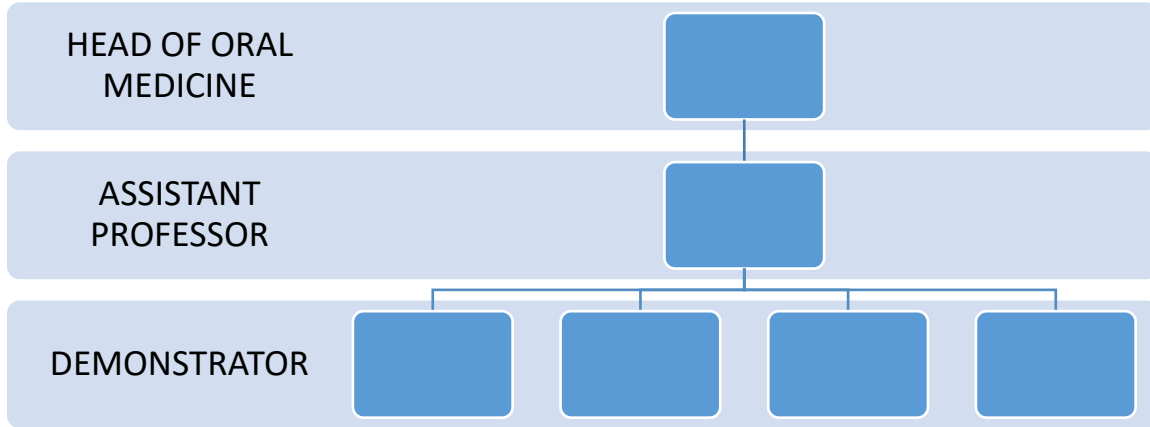
INTRODUCTION TO THE DEPARTMENT OF ORAL MEDICINE

Oral medicine is the specialty of dentistry concerned with the oral health care of patients with chronic, recurrent and medically related disorders of the oral and maxillofacial region, and with their diagnosis and non-surgical management.

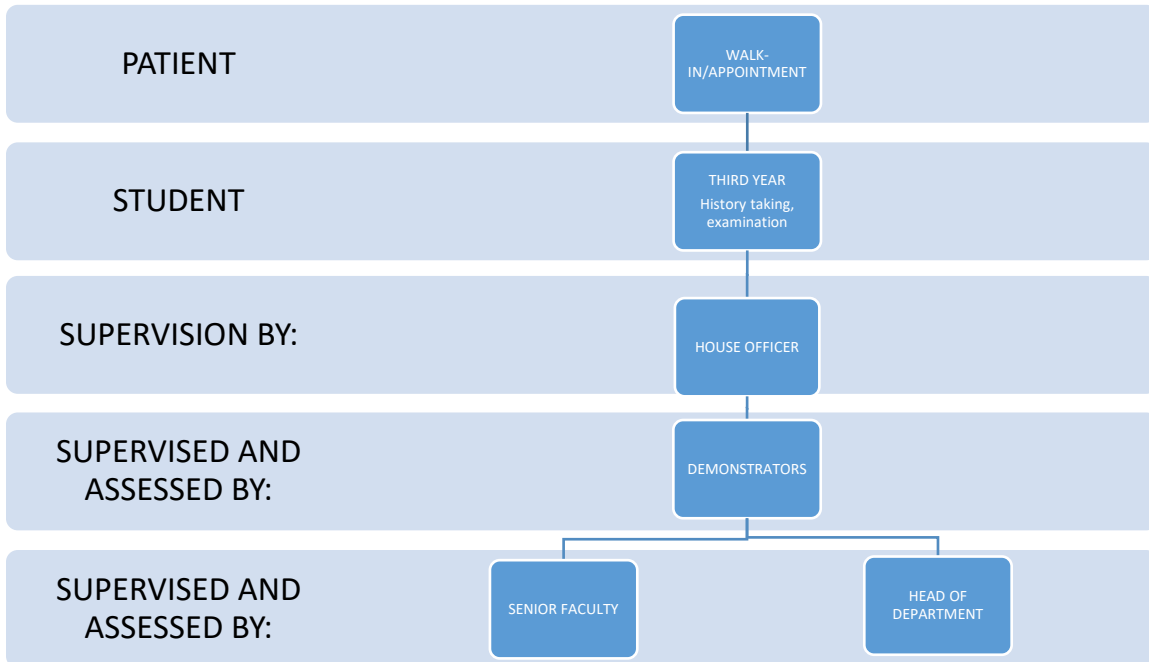
Oral medicine acts a focus for specialist interdisciplinary care of patients with symptoms arising from the mouth that do not relate directly to teeth. These symptoms are often chronic and may have a significant psychological, as well as physical impact on the patient's quality of life. In some instances, symptoms and signs reflect local problems restricted to the mouth. However, symptoms and signs can represent oral manifestations of more widespread disease.

In a course of four-year Bachelors in Dental Surgery (BDS) program, oral medicine is taught over a period of one year, which includes the clinical year, i.e., third and fourth year. Oral medicine is taught theoretical as well as Clinical.

DEPARTMENT HIERARCHY



DEPARTMENT TO STUDENT COMMUNICATION



PROGRAM OBJECTIVES

JMDC's program curriculum conforms to the regulations and recommendations of the Pakistan Medical & Dental Council and is designed to integrate academic knowledge and clinical experience which emphasize the following goals:

- Help students acquire relevant knowledge
- Develop student communication skills, both oral and written
- Promote team work
- Instill compassion and empathy
- Uphold Professionalism

VALUES FOR OUR DENTAL GRADUATES

- Equity
- Quality
- Compassionate Behavior
- Social Accountability
- Social Justice
- Humanistic Approach
- Leadership
- Innovation
- Integrity
- Collaboration

CODE OF CONDUCT

- Students attire must be professional, neat and clean
- Footwear must be clean, safe and in good condition.
- Jewelry, buttons, pins, and other accessories must be limited and unobtrusive.
- Hair should be clean and neatly styled.
- Nails must be trimmed neatly.
- Logos, advertisements, slogans, or other messages representing organizations other than JMDC or promoting political, social, religious, or other causes, should be inconspicuous.
- Use of foul/abusive language will not be tolerated

LEARNING OUTCOMES

FOR A THIRD YEAR STUDENT:

By the end of clinical rotation and lectures in oral surgery, the student should be able to:

1. Obtain detailed patient history inclusive of relevant medical history with its oral manifestations.
2. Perform clinical examination (intra-oral and extra-oral) relevant to presenting complaint.
3. Order appropriate radiographs
4. Interpret radiographic findings
5. Practice cross infection control protocols.
6. Describe oral lesions.
7. Explicate the non-odontogenic pain in oro-facial region.
8. Identify the history and habits leading to malignant oral lesions, especially in relation to our region.
9. Develop moral reasoning for ethical dilemmas.
10. Display effective communication.

STRATEGIES FOR LEARNING AND TEACHING:

1. Lectures (teaching large group):

The traditional way of teaching is adapted, it comprises of lecture having duration of 50 minutes three times a week for final year and once a week for third year. To keep a check of assessment of student learning through lectures following techniques are utilized;

- a. Quizzes.
- b. Interactive sessions.
- c. Student engagement to stimulate critical thinking.
- d. Activities for better understanding of topics.

2. Hands on learning:

Clinical learning in the out-patient department of oral surgery, in these timings both third year and final year students are engaged through;

- a. On patient learning.
- b. Supervised Small group discussions.
- c. Suturing skills.
- d. Taking vitals.
- e. Communication skills.

3. Self-Preparatory Material:

To complement the lectures, students are provided with videos, relatable book chapters and materials for better understanding. Along with these assignments, presentations and group activities are conducted.

4. E-Learning:

In the current times of pandemic COVID-19, distance learning has been incorporated in the strategies of learning and teaching.

In these challenging times an easy access has been provided to the students through E-portal. Each student has the access to the portal through their individual IDs, on which they can go through the recorded lectures and material whenever they want.

ASSESSMENT TOOLS TO EVALUATE STUDENT LEARNING:

1. In-Class Assessment:

- a. Attendance.
- b. Quizzes.
- c. Presentations.
- d. Assignments.

2. Ward Assessment:

A test is conducted in mid and end of the clinical rotation to assess the learning of students. It is to ensure that the students develop the required proficiencies under a supervised environment.

3. Examination Assessment:

a. Mid Term examinations:

These are conducted in the mid of the academic year. It comprises of two components;

Component	Marks
BCQs	50
OSCE/VIVA	50
TOTAL	150

b. Pre-Professional examinations:

These are conducted in the end of the academic year before the final professional examination. It comprises of two components;

Component	Marks
BCQs	50
OSCE/VIVA	130
TOTAL	250

c. Professional Examinations:

At the end of the academic year, JSMU conducts this exit examination that will award the students with the Bachelors in Dental Surgery (BDS) degree.

d. Internal Evaluation:

1.	Assignments / class tests / ward tests	25%
2.	Mid-term	35%
3.	Pre-prof	35%
4.	Extra effort	5%

Assignments / Tests / Mid-term / Pre-prof		
1.	Present and Fail	25%
2.	Pass	Actual percentage
3.	Absent	Zero

Eligibility for sitting in the Professional Annual Examinations will be as follows:

1. Minimum of **40% aggregate** marks in all the Internal Examinations (Mid-term, Pre-prof, Assignments and Tests).
2. Students with less than **75% overall class attendance** will not be allowed to sit in the Annual Professional Examinations.
3. Clinical attendance will be maintained separately. Attendance in any clinical rotation which falls below **75%** must be made up by the students.
4. Students must obtain **passing marks in the clinical ward tests**. Failing to do do, students will have to sit for a re-take ward test (only one retake is allowed).

COURSE CONTENT TAUGHT IN THIRD YEAR:

Following course content is covered over the period of two years:

By the end of the BDS 3rd year student should be able to have a basic knowledge about the following

1. PRINCIPLES OF INVESTIGATIONS AND DIAGNOSIS

S.no.	Topics	Objectives	Teaching and Learning Methodology	Assessment Tools	Credit Hours
1.	History taking	<ol style="list-style-type: none"> 1. Record a comprehensive history 2. Understand each aspect of history <ol style="list-style-type: none"> I. Demographic details II. Presenting complaint (significance of recording it in the patient's own words) III. History of the presenting complaint IV. Medical history (impact of the co-morbid on oral health) V. Dental history VI. Family and social history 	<ul style="list-style-type: none"> • Lectures • Chair- side teaching • Teaching in radiology department • Supervised work on patients • Clinical Rotation 	<ul style="list-style-type: none"> • BCQs • OSCEs • Direct observation of clinical skills • Direct observation of procedural skills <p>Will be assessed during:</p> <ul style="list-style-type: none"> • Daily supervision • Mid-term and Pre prof examination • Clinical rotation 	50
2.	Investigations	<ol style="list-style-type: none"> 1. Conduct detailed extra-oral and intra-oral examination <ol style="list-style-type: none"> I. INTRA-ORAL <ol style="list-style-type: none"> a. Periodontal status b. Soft tissues c. Caries 	<ul style="list-style-type: none"> • Lectures • Chair- side teaching • Teaching in radiology department 	<ul style="list-style-type: none"> • BCQs • OSCEs • Direct observation of clinical skills 	

		<p>d. Occlusion</p> <p>II. EXTRA-ORAL</p> <p>a. TMJ</p> <p>b. Cervical lymph nodes</p> <p>c. Mouth opening</p> <p>d. Facial symmetry</p> <p>2. Cranial nerve examination (particular emphasis on CN V and VII)</p> <p>3. Analyze the data provided on the following investigations</p> <p>I. Hematological</p> <p>II. Radiographs</p> <p>III. Histopathology</p> <p>IV. Specialized imaging e.g.: Sialography, CT scan, MRI, Radioisotope scan</p> <p>V. Molecular biology</p> <p>VI. Culture & sensitivity, PCR and serology</p> <p>VII. Immunohistochemistry</p>	<ul style="list-style-type: none"> Supervised work on patients Clinical Rotation 	<ul style="list-style-type: none"> Direct observation of procedural skills <p>Will be assessed during:</p> <ul style="list-style-type: none"> Daily supervision Mid-term and Pre prof examination Clinical rotation 	
3.	Diagnosis	<p>1. Propose differential diagnosis on the basis of</p> <p>I. Site of lesion</p> <p>II. Type of lesion</p> <p>III. Physical characteristics of lesion</p>			
4.	Treatment planning	<p>1. Provide a treatment plan for common oral pathologies</p>			

2. ORAL INFECTIONS

1.	Bacterial Infections	<p>1. Discuss the sign and symptoms and clinical features of oro-facial bacterial infections</p> <p>I. Odontogenic infections</p> <p>a. Routes of spread</p> <p>b. Cellulitis</p> <p>c. Ludwig's angina</p> <p>d. Facial space infections</p> <p>II. Actinomycosis</p> <p>III. Syphilis</p>	<ul style="list-style-type: none"> Lectures Chair- side teaching Teaching in radiology department Supervised work on patients Clinical Rotation 	<ul style="list-style-type: none"> BCQs OSCEs Direct observation of clinical skills Direct observation of procedural skills 	
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		<ol style="list-style-type: none"> 2. State the investigations required to reach a diagnosis 3. Management of patients presenting with bacterial infections 4. Justify the choice of specific antibiotics used to treat each infection 5. Discuss reasons for antibiotic resistance 		<p>Will be assessed during:</p> <ul style="list-style-type: none"> • Daily supervision • Mid-Term and Pre prof examination • Clinical rotation 	
2.	Viral Infections	<ol style="list-style-type: none"> 1. Describe the sign and symptoms and clinical features of oro-facial viral infections <ol style="list-style-type: none"> I. Herpes simplex virus II. Varicella zoster virus III. Coxsackie virus IV. Epstein Barr virus V. Cytomegalovirus VI. Human immunodeficiency virus 1. Management of patients presenting with viral infections 2. Justify the choice of specific antiviral therapy used to treat each infection 			
3.	Fungal Infections	<ol style="list-style-type: none"> 1. Classification of fungal infections 2. Describe the sign and symptoms and clinical features of oro-facial fungal infections 3. State the investigations required to reach a diagnosis 4. Management of patients presenting with fungal infections 5. Explain reasons for failure of anti- fungal therapy 			

3. ORAL ULCERATIVE LESIONS

1.	Classification	1. Classify oral ulcers on the basis of etiology	<ul style="list-style-type: none"> • Lectures • Chair- side teaching • Teaching in radiology department • Supervised work on patients • Clinical Rotation 	<ul style="list-style-type: none"> • BCQs • OSCEs • Direct observation of clinical skills • Direct observation of procedural skills <p>Will be assessed during:</p> <ul style="list-style-type: none"> • Daily supervision • Mid-term and Pre prof examination <p>Clinical rotation</p>	
2.	Non-vesiculobullous conditions	<ol style="list-style-type: none"> 1. Discuss the sign and symptoms and clinical features of non-vesiculobullous conditions 2. State the investigations available for diagnosis 3. Enlist the available pharmacological treatment options 			
3.	Vesiculobullous conditions	<ol style="list-style-type: none"> 1. Discuss the sign and symptoms and clinical features of vesiculobullous conditions 2. State the investigations available for diagnosis 3. Enlist the available pharmacological treatment options 			

4. ORAL SOFT TISSUE LESIONS

1.	White lesions	<ol style="list-style-type: none"> 1. Classify white lesions occurring in the oral cavity 2. Identify the white lesion based on <ol style="list-style-type: none"> I. History II. Etiology III. Clinical features 3. Explain management options for unresolving white lesions 	<ul style="list-style-type: none"> • Lectures • Chair- side teaching • Teaching in radiology department • Supervised work on patients • Clinical Rotation 	<ul style="list-style-type: none"> • BCQs • OSCEs • Direct observation of clinical skills • Direct observation of procedural skills <p>Will be assessed during:</p> <ul style="list-style-type: none"> • Daily supervision • Mid-term and Pre prof examination • Clinical rotation 	
2.	Red lesions	<ol style="list-style-type: none"> 1. Classify red lesions occurring in the oral cavity 2. Identify the red lesion based on <ol style="list-style-type: none"> I. History II. Etiology III. Clinical features 3. Explain management options for unresolving red lesions 			
3.	Pigmented lesions	<ol style="list-style-type: none"> 1. Classify pigmented lesions of the oral cavity 2. Discuss the sign and symptoms and clinical features of malignant melanoma 3. Differentiate between malignant melanoma and other pigmented lesions of the oro-facial region 4. Describe management of malignant melanoma 			
4.	Pre-malignant lesions and ulcers	<ol style="list-style-type: none"> 1. Differentiate between premalignant lesions and conditions 			

		<ol style="list-style-type: none"> 2. Describe management of dysplastic lesions 3. Enlist risk factors for development of malignancy in premalignant lesions/conditions 			
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5. MOTOR AND SENSORY CHANGES IN THE ORO-FACIAL REGION

1.	Facial pain	<ol style="list-style-type: none"> 1. Differentiate between diverse presentations of facial pain based on <ol style="list-style-type: none"> I. History II. Clinical examination 2. Discuss the clinical features, diagnosis and management options of <ol style="list-style-type: none"> I. Trigeminal neuralgia II. Atypical facial pain III. Burning mouth syndrome 	<ul style="list-style-type: none"> • Lectures • Chair- side teaching • Teaching in radiology department • Supervised work on patients • Clinical Rotation 	<ul style="list-style-type: none"> • BCQs • OSCEs • Direct observation of clinical skills • Direct observation of procedural skills <p>Will be assessed during:</p> <ul style="list-style-type: none"> • Daily supervision • Mid-term and Pre prof examination • Clinical rotation 	
2.	Facial palsy	<ol style="list-style-type: none"> 1. State the etiological factors involved in facial palsy 2. Identify Bell's palsy in patients presenting to the OPD 3. Discuss management options regarding facial palsy 			

6. SALIVARY GLAND DISORDERS

1.	Salivary flow obstruction	<ol style="list-style-type: none"> 1. Classify salivary flow obstruction on the basis of etiology 	<ul style="list-style-type: none"> • Lectures • Chair- side teaching 	<ul style="list-style-type: none"> • BCQs • OSCEs 	
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		<p>2. Describe the pathophysiology, clinical features, investigations and management options of</p> <ol style="list-style-type: none"> I. Salivary calculi II. Mucocele III. Ranula 	<ul style="list-style-type: none"> • Teaching in radiology department • Supervised work on patients • Clinical Rotation 	<ul style="list-style-type: none"> • Direct observation of clinical skills • Direct observation of procedural skills <p>Will be assessed during:</p> <ul style="list-style-type: none"> • Daily supervision • Mid term and Pre prof examination • Clinical rotation 	
2.	Infections (sialadenitis)	<p>1. Describe the pathophysiology, clinical features and management options of</p> <ol style="list-style-type: none"> I. Acute bacterial sialadenitis II. Chronic bacterial sialadenitis III. Suppurative parotitis IV. Viral sialadenitis (mumps) <p>2. Differentiate between bacterial and viral sialadenitis</p>			
3.	Xerostomia	<ol style="list-style-type: none"> 1. Classify etiological factors relating to xerostomia 2. Discuss the clinical features of Sjogren's syndrome 3. Explain the management of xerostomia (with particular emphasis on Sjogren's syndrome) 			

7. TEMPOROMANDIBULAR JOINT DISORDERS

1.	Evaluation	<ol style="list-style-type: none"> 1. Describe the commonly occurring sign and symptoms of temporomandibular disorders 2. Discuss the recently available investigation modalities for temporomandibular disorders (TMJ arthrography, CT scan and MRI) 	<ul style="list-style-type: none"> • Lectures • Chair- side teaching • Teaching in radiology department • Supervised work on patients • Clinical Rotation 	<ul style="list-style-type: none"> • BCQs • OSCEs • Direct observation of clinical skills • Direct observation of procedural skills <p>Will be assessed during:</p> <ul style="list-style-type: none"> • Daily supervision • Midterm and Pre prof examination • Clinical rotation 	
2.	Treatment	<ol style="list-style-type: none"> 1. Enlist available pharmacological treatment options, occupational therapy, prosthetic splint therapy and alternative medical therapy for pain 			

8. SYSTEMIC DISORDERS

1.	Cardiovascular diseases	<ol style="list-style-type: none"> 1. Explain the clinical considerations for dental management of patients 	<ul style="list-style-type: none"> • Lectures • Chair- side teaching 	<ul style="list-style-type: none"> • BCQs • OSCEs • Direct observation 	
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		<ol style="list-style-type: none"> I. With cardiovascular disease II. On warfarin therapy III. On anti-platelet medication <ol style="list-style-type: none"> 2. Discuss the recent guidelines of antibiotic prophylaxis for infective endocarditis 3. Enlist oral manifestations of anti-hypertensive drugs 	<ul style="list-style-type: none"> • Teaching in radiology department • Supervised work on patients • Clinical Rotation 	<p>of clinical skills</p> <ul style="list-style-type: none"> • Direct observation of procedural skills <p>Will be assessed during:</p> <ul style="list-style-type: none"> • Daily supervision • Mid term and Pre prof examination • Clinical rotation 	
2.	Respiratory diseases	<ol style="list-style-type: none"> 1. Describe the management of patients presenting with the following co-morbid: <ol style="list-style-type: none"> I. Asthma II. Chronic obstructive pulmonary disease 2. Discuss the clinical features, investigations and treatment of sarcoidosis 			
3.	Gastrointestinal diseases	<ol style="list-style-type: none"> 1. Describe oral manifestations of <ol style="list-style-type: none"> I. Crohn's disease II. Ulcerative colitis III. Orofacial granulomatosis IV. Coeliac disease V. Hepatitis B & C 2. Discuss considerations for dental management of patients with inflammatory bowel disease and Hepatitis B & C 			
4.	Renal diseases	<ol style="list-style-type: none"> 1. Enlist oral manifestation of patients with renal diseases 2. Describe considerations for dental management of 			

		patients with chronic renal disease			
5.	Hematological diseases	<ol style="list-style-type: none"> 1. Describe the oral manifestations of the following hematological diseases <ol style="list-style-type: none"> I. Anemia II. Leukemia III. Lymphoma 2. Discuss considerations for dental management of patients with aforementioned conditions 			
6.	Hemorrhagic diseases	<ol style="list-style-type: none"> 1. Discuss the oral manifestations of the following hemorrhagic conditions <ol style="list-style-type: none"> I. Purpura II. Von willebrand disease III. Hemophilia 2. Discuss considerations for dental management of patients with hemorrhagic diseases 			

ORAL MEDICINE CLINICAL ROTATION WEEKLY SCHEDULE

ORIENTATION SESSION:

- Introduction to department.
- Introduction to demonstrators/lecturers.
- Effective communication.
- Code of conduct:
 - OPD timings (Punctuality)
 - Dress code
 - Lab coat
 - Tied-up hair
 - Covered shoes etc.
- Hand wash technique.
- Briefing about;
 - Dental units,
 - Instruments,
 - Diagnosis and
 - Patients' record maintenance
 - Log book maintenance
- Cross infection control.

ORAL MEDICINE

THIRD YEAR CLINICAL ROTATION

Credit hours: 75

Objective: By the end of the clinical rotation the 3rd year BDS student should be able to demonstrate the following clinical and procedural skills.

S. No.	Clinical and Procedural Skills	Teaching Methodology	Assessment tools
1.	Instruments and chair position-demonstration	<ul style="list-style-type: none"> • Chair- side teaching • Teaching in radiology department • Supervised work on patients • Presentations and Discussions 	<ul style="list-style-type: none"> • OSCEs • Direct observation of clinical skills • Direct observation of procedural skills <p>Will be assessed during:</p> <ul style="list-style-type: none"> • Daily supervision • Clinical rotation
2.	History taking and clinical examination		
3.	Interpretation of radiographs (peri-apical, bitewing, OPG and occlusal)		
4.	Identification and differential diagnosis of various odontogenic and soft tissue cysts		
5.	Identification and differential diagnosis of various infections including the bacterial, viral and fungal		
6.	Identification and differential diagnosis of various odontogenic tumors		
7.	Identification and differential diagnosis of various salivary gland disorders		
8.	Identification and differential diagnosis of various oro-facial pathologies including the white, red and pigmented lesions. Potentially malignant lesions and the oral squamous cell carcinoma		

9.	Identification and differential diagnosis of various disorders of the Temporo Mandibular Joint		
10.	Identification and differential diagnosis of various oro facial ulcers		

THIRD YEAR CLINICAL AND TUTORIAL TOPICS

11.	Identification and differential diagnosis of various oral manifestations of the systemic diseases		
12.	Identification and differential diagnosis of various Oro facial pain and Headaches		

1. Pharmacokinetics and Pharmacodynamics of following drugs:
 - i. Amoxil.
 - ii. Flagyl.
 - iii. Velocef.
 - iv. Panadol.

- v. Brufen.
- 2. Local anesthesia:
 - i. Classification.
 - ii. L.A ingredients.
 - iii. Mechanism of Action.
 - iv. Toxicity.

**OPD SCHEDULE
THIRD YEAR**

DAYS	Mon	Tue	Wed	Thu	Fri	Sat
	DEMO (10:30-11:30)	SKILLS (11:00-12:00)	PRESENTATION (12:00-12:30)	-	-	
WEEKS						
1	History		Antibiotics (Amoxil/Flagyl)	-	-	
2	Examination (oral and nerves)		Pain killer (Panadol/Nsaids)	-	-	
3	Patient/Operator Positioning		Nerve supply	-	-	
4	Suturing Technique		Local anesthesia	-	-	
