



Institute of Dentistry,
CMH Lahore Medical College
Curriculum and study Guide
Third Year BDS
deaniod@cmhlahore.edu.pk

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Introduction to study guide

This study guidebook is designed for Dental undergraduates by consolidated effort of all subjects across the year to provide Dental students of IOD CMH Lahore Medical College a resource material which would highlight important aspects of curriculum. The study guide aims to promote self-regulated lifelong learning among students by giving them the control over their learning.

The pervasive curriculum aspects of undergraduates' competencies, assessment policies and curriculum coordinators are mapped in this guidebook. Horizontal integration across the year better conceptual understanding while vertical integration promotes clinically relevant understanding. IOD CMH aims to improve health indicators of society by improvement of students and doctors in preventive health service provision and health education provision to society through community programs.

The study guide gives an overview of intended course outcomes and objectives in relation to the course content. The assessment methodology tailored to instructional strategy is provided.

This study guide has been carefully designed keeping in view PMDC and NUMS curriculum and giving dedicated effort by faculty is done to make this guide tailored to student's needs. Students feedback has been sought and incorporated at all stages during study guide development. Curriculum is a living dynamic entity. Our aim to improve it by every passing day. This humble effort of all faculty acts as a guiding light for our dear students.

Mission Statement

To provide an excellent learning and teaching environment, inculcating ethical values and social responsibilities in undergraduate and postgraduate medical & dental students and nursing and allied health sciences students to enhance the level of comprehension healthcare in the Army/Country.

Vision Statement

To ensure the development of internationally acclaimed quality standards and practices for the NUMS higher education that benefits and lives up to the stakeholder's needs and expectations

Rationale of Curriculum

The curriculum is designed to address both local and international needs. The curriculum is focused to prepare students for the international licencing exams and training abroad as well as empowering them to treat local patients with safety and efficiency. Dentists work as a healer in the community. A dentist should have evidence based and update knowledge about the epidemiology of the practicing area. The curriculum of IOD CMH LMC is planned with a collaboration of clinical and basic sciences faculty in addition to students and family medicine department to ensure that the prevailing health conditions of the society are treated and dealt with effectively. The emergence of new techniques in preservation of existing dentition and restoration of the lost dentition and oral structures has led to changes in the curriculum with more emphasis on new and advanced techniques, procedures and evolution of new and advanced technology (e.g. CAD/CAM & Implants).

Introduction to Curricular Framework

This study guide is developed as resource assistance to the students and faculty. The study guide development process included representation from teaching faculty, management, leadership of college and students. The study guide is made to achieve and alignment between societies' needs, institutional needs, patient needs & student's needs.

The curriculum implemented is a hybrid type of curriculum which has both horizontal and vertical integration. Spiral integration is introduced as an adjunct to horizontal and vertical integration. The curriculum spans over 3 phases

PHASE 1 (Year 1&2): Includes basic sciences Anatomy, physiology, biochemistry, Oral biology, Science of dental Material, Pharmacology and Community Dentistry, it also includes preclinical Prosthodontics, general pathology.

PHASE 2 (Year 3rd & Final Year): includes Periodontology, Oral Pathology, Oral Medicine, General Medicine, General Surgery, Oral Surgery, Prosthodontics, Orthodontics, Operative Dentistry.

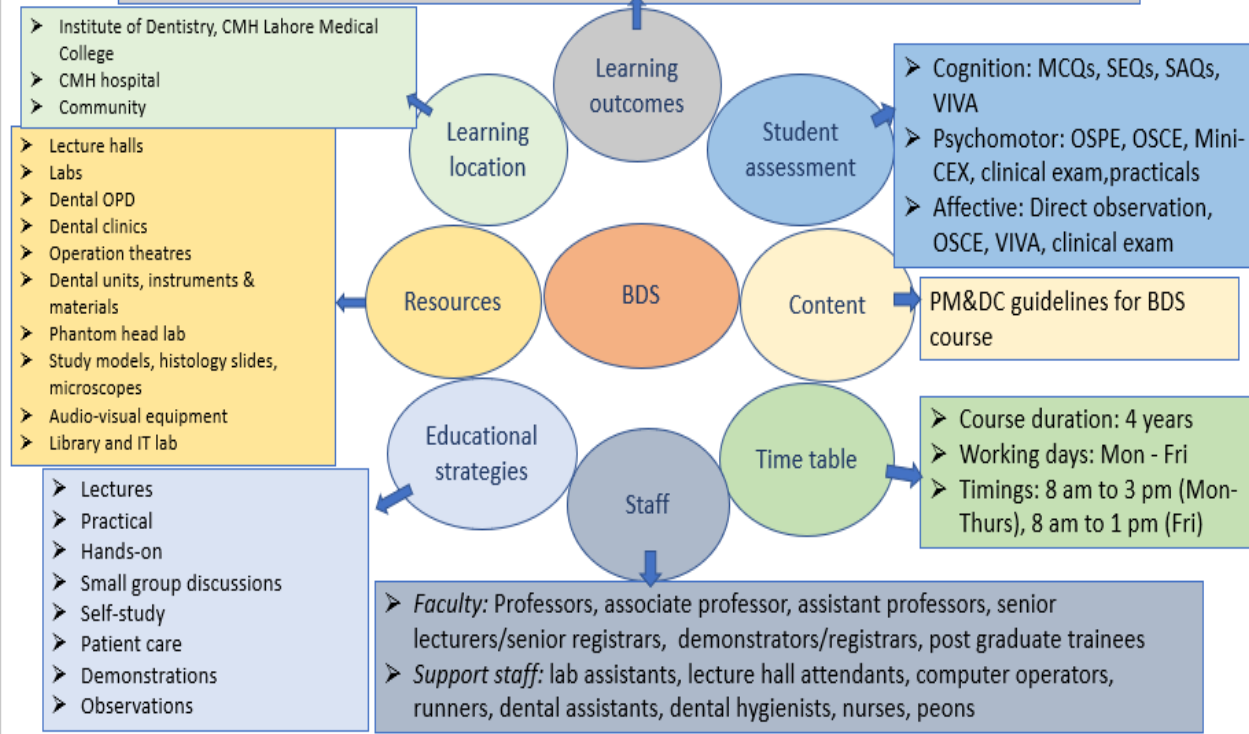
4 Years Curricular Framework

BDS SCHEME OF STUDIES

<u>BASIC DENTAL SCIENCES / PRE-CLINICAL YEAR</u>		<u>CLINICAL YEARS</u>	
1 st YEAR	2 nd Year	3 rd Year	Final Year
Anatomy	Science of Dental Material	Periodontology	Prosthodontics
Physiology	Gen. Pathology	Oral pathology	Operative Dentistry
Biochemistry	Pharmacology	Oral Medicine	Oral Surgery
Pak studies & Islamic Studies	Community Dentistry	Gen. Medicine	Orthodontics
Oral Biology	Pre-Prosthodontics	Gen. Surgery	
	Pre-Operative Dentistry	Oral Surgery	
	Behavioral Sciences	Prosthodontics	
Behavioral Sciences		Behavioral Sciences	Behavioral Sciences
Self-Directed Learning Sessions			

BDS curricular map

By the end of 4th year, BDS students will be able to co-relate and apply the basic and clinical dental sciences knowledge, skills and attitudes to effectively manage and treat dental patients according to the competencies laid down by PM&DC



BDS Program outcomes

At the end of four years dental undergraduate program, the graduates should be able to:

1. Independently assess the patients, order relevant investigations, and formulate a treatment plan.
2. Render treatments in the domain of general dental practitioners to their patients in time efficient and quality controlled manner.
3. Practice evidence based dentistry.
4. Modify dental treatments according to patient's special needs, if any, in the form of medical conditions, physical or mental disabilities etc.
5. Assess and refer the patients with case difficulty indices requiring consultation or treatment by specialists.
6. Show empathy and respect in their attitude and behavior towards their patients.
7. Maintain high ethical and professional standards in their pursuit of clinical excellence.
8. Draw upon their existing knowledge and update it through continuing education programs.
9. Exercise infection control protocol guidelines laid out by their local health councils.
10. Exercise management qualities to maintain single or multiple unit private practices where applicable.
11. Work in a team of other health care professionals including dentists, dental assistants, dental hygienists, laboratory technicians, ceramists and dental nurses etc.
12. Maintain patient records with emphasis on legal and patient confidentiality aspects.
13. Provide basic life support to patients requiring critical care in or outside dental set up.
14. Manage dental emergencies in a dental set up.
15. Demonstrate clear verbal and written communication skill.

Undergraduate Competencies

IOD CMH Lahore medical College envisions to produce graduates who are proficient in following competencies at the end of 4th year

- ◆ Dental Expertise
- ◆ Communication
- ◆ Critical thinking
- ◆ Management
- ◆ Scholar
- ◆ Professionalism
- ◆ Evidence based practice providing holistic care
- ◆ Empathetic
- ◆ Providing Community service

Co-ordinators Third Year BDS 2021

Coordinator Name	Department	Extension
Dr. Yousaf Athar Assistant Professor	Periodontology	340
Prof. Dr. Faiqua Yaseer Professor	Oral Pathology	
Dr. Muhammad Shairaz Sadiq Associate Professor	Oral Medicine	350
Dr Javed Iqbal Associate professor	General Medicine	
Prof Dr.Imran Hameed Daula Professor	General Surgery	

Name	Designation
	CR 1 st Year BDS
	GR 1 st Year BDS
	CR 2 nd Year BDS

Class

	GR 2 nd Year BDS
Ali Nadeem	CR 3 rd Year BDS
Azka Taimur	GR 3 rd Year BDS
	CR Final Year BDS
	GR Final Year BDS

representatives

Clerkship Subjects

Following are the core subjects for Third year BDS for which professional examination will be held at the end of the academic year:

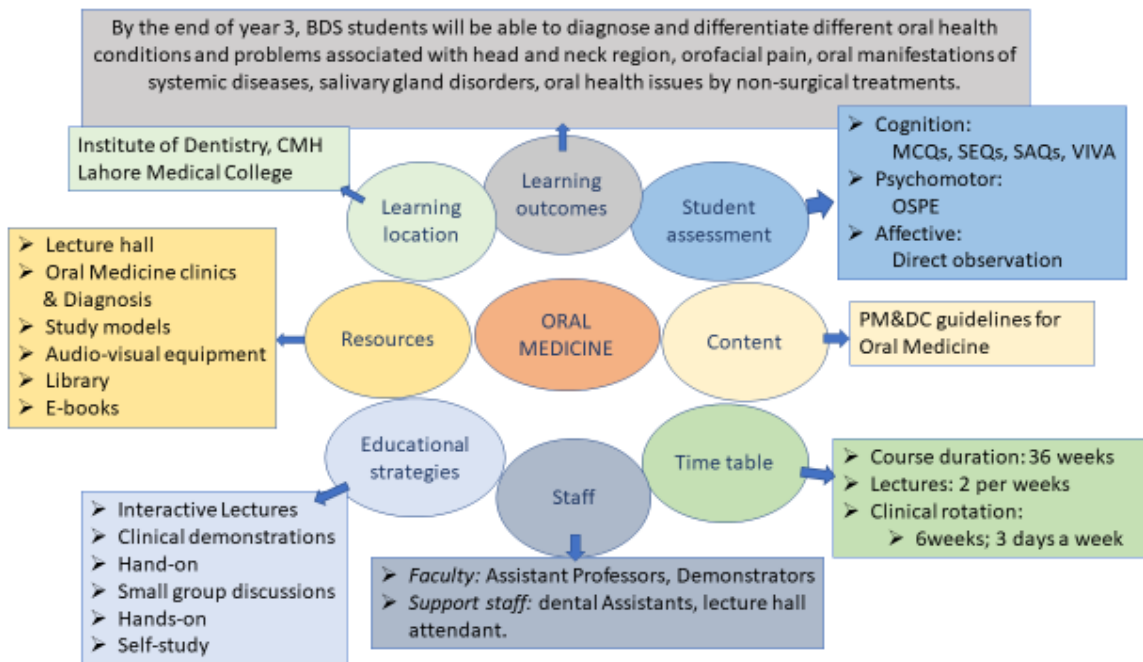
1. Periodontology
2. Oral Pathology
3. Oral Medicine
4. General Medicine
5. General Surgery

Hours of teaching

Subject	Total Teaching Hours CMH
Periodontology	175
Oral Pathology	
Oral Medicine	125
General Medicine	
General Surgery	

INTRODUCTION TO ORAL MEDICINE

Oral medicine is the discipline of dentistry concerned with the oral health. Diagnosis and management of medical conditions that affect the oral and maxillofacial region such as; orofacial pain, oral manifestations of systemic diseases, salivary gland disorders, and the management of medically compromised patients with oral health issues by non-surgical treatments.



Resources

1. Teaching resources
2. Infrastructure resources

Teaching resources

Sr. #.	Faculty Name	Designation as per PM & DC certificate	Qualification
1	Dr. Muhammad Shairaz Sadiq	Associate Professor	BDS, MCPS
2	Dr. Fareed Ahmad	Assistant Professor	BDS, MCPS
3	Dr. Aimen Malik	Registrar	BDS
4	Dr. Zaid Bin Sohail	Registrar	BDS, MFDS RCSEd
5	Dr. Mehek Javed	Registrar	BDS
6	Dr. Bersha Mir	Registrar	BDS

Infrastructure resources

Sr. #.	Infrastructure Resources	Quantity
1	Oral Medicine and Diagnosis Dental Hall	<ul style="list-style-type: none">• 1
2	Dental Units <ul style="list-style-type: none">• Oral Medicine• Diagnosis	<ul style="list-style-type: none">• 2• 2
3	Dental Stools <ul style="list-style-type: none">• Oral Medicine• Diagnosis	<ul style="list-style-type: none">• 2• 2

4	Reception	1
5	Mini Library	1
7	Dental equipment and materials	

TEACHING AND LEARNING STRATEGIES

Multiple educational methods will be used comprising of self-study, interactive lectures, group discussions, and practical, and manual dexterity skill sessions.

(i) Methods for achieving cognitive objectives

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

(ii) Methods for achieving psychomotor objectives

- Theoretical information provided in lectures
- Clinical demonstrations provided by teaching faculty on models and patients
- Supervised practice on patients

(iii) Methods for achieving affective objectives

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

LEARNING METHODOLOGIES

The following teaching /learning methods are used to promote better understanding:

- Interactive lectures
- Small group discussions
- Practical
- Skill sessions
- Self-directed learning
- Assignments
- Oral presentations by students

Interactive lectures

In large group, the lecturer introduces a topic which explains the underlying phenomena through questions, pictures, exercise, etc. Students are actively involved in the learning process.

Small group discussions

This format helps students to clarify concepts and acquire skills and attitudes. Students exchange opinions and apply knowledge gained from lectures and self-study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

Practical

In practical sessions students observe demonstrations from faculty members on proper instrument use and handling both inside and outside the patient's mouth. The students are trained in diagnosing and treating a periodontal disease as per protocols set by the department.

Skill session

Students are required to practice suturing techniques on inanimate materials.

Self- directed learning

Students' take responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Center, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours or afterwards for self-study.

Assignments

Students are given written formative assignments on designated topics. Revision of the topics already covered by anatomy and physiology departments are given to students as oral presentations.

Oral presentations by students

Students are assigned topics during revision session to enhance their communication skills and group learning.

CURRICULUM IMPLEMENTATION

Curriculum implementation refers to putting into practice the official document including course content, objectives, learning and teaching strategies. Implementation process helps the learner to achieve knowledge, skills and attitudes required of the learning tasks. Learners are a pertinent component of the implementation process. Implementation occurs when the learner achieves the intended learning experiences, knowledge, ideas, skills and attitudes which are aimed to make the learner an effective part of the society. Curriculum implementation also refers to the stage at which curriculum is put into effect. There has to be an implementing agent as well. Teacher is an important part of this process and implementation of the curriculum is the way the teacher selects and utilizes various components of the curriculum. Implementation occurs when the teacher's formulated course content, teacher's personality and teaching and learning environment interact with the learners. Therefore, curriculum implementation is how the officially planned course of study is translated and reflected by the teacher into schemes of work, lesson plans, syllabus and resources are effectively transferred to the learners. Curriculum implementation can be affected by certain factors such as teachers, learners, learning environment, resource materials and facilities, culture and ideology, instructional supervision and assessments.

Personnel involved in teaching and facilitation

(i) Lectures delivery by:

Dr Muhammad Shairaz Sadiq (Associate Professor)

Dr Fareed Ahmad (Assistant Professor)

(ii) Demonstrators for practical and small group discussion sessions:

Dr Aimen Malik

Dr Zaid Bin Sohail

Dr Mehek Javed

Dr Bersha Mir

(iii) Support staff: 3 (3 Dental Assistants) as nominated by college

Time frame

Course duration: 36 weeks

Lectures: Block 1, 2 & 3 Friday (9:00 am to 10:00am), Block 3 Thursday (8:00am to 9am)

Clinical rotation: 6 weeks – Block 1 & 3; Tuesday, Thursday and Friday (10:00 am to 1:00pm)

Block 2 Monday, Tuesday, Thursday & Friday (10:00 to 1:00 pm)

COURSE OUTLINE

Normal mucosa assessment and investigations

- Histology
- General health status
- Oral examination (including lips oral mucosa floor of the mouth teeth gingival occlusion salivary glands jaw bones)
- Examination of temporomandibular joint
- Laboratory aids
- Analysis treatment planning and patient management

Soft tissue lesions

- White lesions
- Pigmented lesions
- Ulcerative lesions
- Vesiculo-bulbous lesions
- Pre-malignant lesions clinical features diagnosis and management
- Disorders of the tongue and lips clinical features, diagnosis and treatment planning
- Diseases of salivary glands xerostomia: clinical features, diagnosis and management

Hard tissue lesions

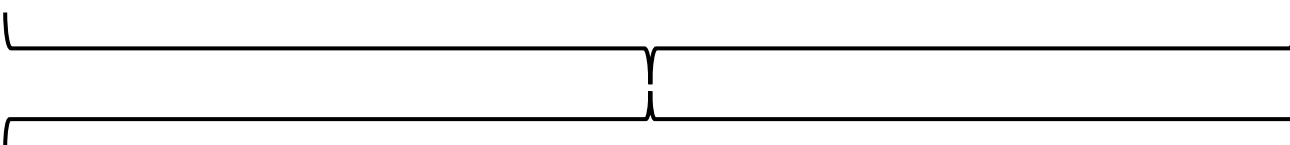
- Diseases of jaw bones; clinical features diagnosis and management
- Diseases of tempo-mandibular joint; clinical features diagnosis and treatment planning
- Disorders of teeth clinical features diagnosis and treatment
- Focal infection; Significance diagnosis and management of effect cases
- Clinical features diagnosis and treatment of pain

Systemic disorders

- Anaemia
- Leukemia
- Bleeding disorders
- Patients on anti-coagulant therapy management

Over View

A1. History taking	A2. Clinical examination	A3. Investigations	A4. Management
			A4a. prescribing & therapeutics
			A4b. operative interventions



B1. Normal mucosa assessment	B2. Soft tissue lesions	B3. Hard tissue lesions	B4. Systemic disorders	B5. Pain in orofacial region	B6. Medical emergencies
Histology	White lesions	Jaw bone diseases	Anaemia	Facial pain	prevention
General health status	Pigmented lesions	TMJ diseases	Leukaemia and leukopenia	Neuropathic pain	Emergency drugs and equipment
Mucosa of lips, floor of mouth and teeth, gingiva and occlusion.	Ulcerative lesions	Disorders of teeth	Bleeding disorders	Migraine, cluster, tension type headaches	
	Vesiculo bulbous lesions	Focal infections	Nutritional deficiencies	Neurological dysfunction	
	Pre-malignant and malignant lesions		Endocrine disturbances		
	Disorders of tongue and lips		Renal diseases		
	Salivary glands diseases				

Third Professional BDS Examination (2021)

Oral Medicine

Time Allowed =01 Hr. and 30 Min. (Including MCQs)

Marks of theory paper =40

Internal assessment =10

Total marks =50

Pass Marks =25

20 x MCQs (20 Marks) Time =25 Minutes

Q. No. 1,2,3,4,5,6,7

2 x SAQs/SEQs (Recall) = 03 marks each

4 x SAQs/SEQs (Application) = 2 x 04 marks, 2 x 03 marks each

Total Marks (20 Marks) Time = 1 hour & 5 mins

S.No	Topic	NUMBER OF MCQs (20) Recall : 04 Application : 16 1 mark each	NUMBER OF SAQs/SEQs (06)
1.	Principles of oral medicine: assessment and investigations of patient	02	02
2.	Bacterial, Viral, & fungal infections of gingiva and oral mucosa		
3.	Oral ulcerations	02	
4.	Diseases of lips and tongue		
5.	Swellings of face and neck	02	
6.	Salivary glands diseases and disturbances of salivary flow.		
7.	Oral pigmentation & Inflammatory overgrowths	01	
8.	Precancerous lesions and conditions	01	01
9.	Oral Carcinoma & Carcinogenesis	01	
10.	Vesiculobullous diseases and connective tissue disorders	01	
11.	Oral manifestations of systemic diseases (Blood, GIT, Nutritional, Renal, Endocrine related) & Their management.	02	02
12.	Orofacial, Neurologic & Psychogenic Pain	02	
13.	Facial Paralysis		
14.	Temporomandibular disorders	02	
15.	Immunity and oral reactions to drug therapy	01	
16.	Disorders of teeth and bone	01	
17.	Osteochemonecrosis of jaws		
18.	Management of medical emergencies in dentistry	02	01
Total		20 (20 Marks)	06 (20 Marks)

Internal Assessment Calculation (Theory Annual)

A	B	C	D
Roll No.	Name	All Modules/ Pre annual Exams or any other exam	Total Marks of internal Assessment out of 20
Total Marks		Sum of Marks obtained x 20 / sum of total marks in all exams	

Table of specifications for Annual Professional Exam: Practical Clinical Assessment

Total	= 50
OSPE	= 18
VIVA	= 18
Log Book	= 04
Internal Assessment	= 10

OSPE (20 Marks)			
	Stations	Marks	Time
Static Stations	5	5x2=10	2 min each station
Interactive Stations	2	2x4=8	4 min each station

Internal Assessment Calculation (Practical)

A	B	C	D
Roll No.	Name	OSPE/ Practical Class tests though out the year/ Pre annual Practical Exams or any other exam	Total Marks of internal assessment Out of 20
Total Marks		Sum of marks obtained x 20 / sum of total marks in all exams	

TOPICS AND OBJECTIVES	FACULTY	LEARNING DOMAIN (CPA)	LEARNING STRATEGY	ASSESSMENT				
				Clinical	Viva	OSPE	NUMS MCQs	NUMS SEQs
Oral Medicine								
1. The Oral Mucosa								
<ul style="list-style-type: none"> Discuss Normal oral Mucosa <ul style="list-style-type: none"> Structure Function Age changes 	Dr. Muhammad Shairaz Sadiq	C	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> Discuss Abnormal oral mucosa 		C	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> Oral mucosa in generalized disease 		C	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> Periodontium in generalized disease 		C	Interactive lecture/small group discussion					
2. Principles of oral medicine: assessment and investigation of patients							2(min of 0, max of 2)	2(min of 0, max of 2)
<ul style="list-style-type: none"> Speciality of oral medicine 		C	Interactive lecture					
<ul style="list-style-type: none"> Patient assessment <ul style="list-style-type: none"> History taking Examination 		CPA	Interactive lecture/ clinic visits					

<ul style="list-style-type: none"> • Investigations <ul style="list-style-type: none"> ○ Blood examination ○ Clinical chemistry ○ Immunological tests ○ Endocrine function ○ Urinalysis ○ Biopsy <ul style="list-style-type: none"> ○ Microbiological investigations • Imaging techniques 	<p style="text-align: center;">Dr. Muhammad Shairaz Sadiq</p>	C	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> • Discuss how to form diagnosis 		C	Interactive lecture/case-based discussion					
3. Therapy								
<ul style="list-style-type: none"> • Discuss Principles of Therapy 	<p style="text-align: center;">Dr. Muhammad Shairaz Sadiq</p>	C	Interactive lecture					
<ul style="list-style-type: none"> • Discuss topical therapy <ul style="list-style-type: none"> ○ Covering agents ○ Topical antiseptics ○ Topical analgesics ○ Topical antibiotics • Topical corticosteroids 		C	Interactive lecture/case-based discussion					

<ul style="list-style-type: none"> • Discuss Creams and ointments 		C	Interactive lecture/ case based discussion					
<ul style="list-style-type: none"> • Discuss systemic therapy ○ Systemic corticosteroids ○ Azathioprine • Other systemic drugs used in oral medicine 		C	Interactive lecture/ Case based discussion					
<ul style="list-style-type: none"> • Discuss Limitations of therapy 		C	Interactive lecture/ case based discussion					
4. Infections of gingivae and oral muosa							2(min of 0, max of 2)	2(min of 0, max of 2)
<ul style="list-style-type: none"> • Discuss Bacterial infections ○ Acute necrotizing ulcerative gingivitis ○ Syphilis ○ Gonorrhea ○ Non-specific urethritis ○ Tuberculosis 	Dr. Fareed Ahmad	C	Interactive lecture/ case based discussion					
<ul style="list-style-type: none"> • Discuss Fungal infections Oral candidiosis 		C	Interactive lecture/ case based discussion					

<ul style="list-style-type: none"> • Discuss Viral infections ○ Herpes simplex virus infections ○ Varicella zoster virus infections ○ Epstein-Barr virus infections ○ Paramyxovirus infections ○ Human papillomavirus infections ○ Human immunodeficiency virus and AIDS 		C	Interactive lecture/ case based discussion					
5. Oral Ulceration							3(min of 0 , max of 3)	2(min of 0, max of 2)
<ul style="list-style-type: none"> • Discuss Traumatic ulceration ○ Aetiology ○ Clinical features ○ Management 	Dr Muhammad Shairaz Sadiq	C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> • Discuss Recurrent aphthous stomatitis (RAS) ○ Clinical features ○ Aetiology of RAS ○ Histopathology and immunopathogenesis of RAS ○ Systemic conditions and RAS like lesions ○ Management of RAS 		C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> • Behcet's disease 		C	Interactive lecture					

6. Diseases of the lips and tongue and disturbances of taste and halitosis								3(min of 0, max of 3)	2(min of 0, max of 2)
<ul style="list-style-type: none"> • Discuss diseases of the lips ○ Swelling of the lips ○ Angular cheilitis (angular stomatitis, chelosis, perleche) ○ Lip fissures ○ Allergic cheilitis ○ Actinic cheilitis (solar keratosis) ○ Exfoliative cheilitis ○ Perioral dermatitis ○ Lick eczema ○ Cheilocandidosis 	Dr. Fareed Ahmad	C	Interactive lecture/ case based discussion						
<ul style="list-style-type: none"> • Discuss diseases of tongue ○ Developmental abnormalities and morphological variations ○ Tongue fissures ○ Coated tongue ○ Hairy tongue ○ Atrophy of the lingual epithelium ○ Traumatic irritation of the tongue ○ Enlargement of the foliate papillae ○ Geographic tongue (erythema migrans, benign migratory glossitis), median rhomboid glossitis 		C	Interactive lecture/ case based discussion						
<ul style="list-style-type: none"> • Discuss disturbances of taste and halitosis ○ Disturbances of taste 		C	Interactive lecture/ case based discussion						

7. Swellings of the face and neck							2(min of 0, max of 2)	2(min of 0, max of 2)
<ul style="list-style-type: none"> • Discuss facial swellings Differential diagnosis 	Dr. Muhammad Shairaz Sadiq	C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> • Discuss Swellings in the neck 		C	Interactive lecture					
<ul style="list-style-type: none"> • Discuss Cervical lymphadenopathy ○ Differential diagnosis ○ Examination of the lymph nodes ○ Inflammatory causes • Neoplastic causes of lymph node enlargement 		C	Interactive lecture/ case based discussion					
8. Salivary glands and saliva							2(min of 0, max of 2)	2(min of 0, max of 2)
<ul style="list-style-type: none"> • Discuss saliva and salivary glands ○ Saliva ○ Salivary glands 	Dr. Fareed Ahmad	C	Interactive lecture					
<ul style="list-style-type: none"> • Discuss assessment of the salivary glands Examination ○ Measurement of the salivary flow ○ Salivary gland imaging ○ Sialochemistry ○ Biopsy 		CPA	Interactive lecture/clinical session					

<ul style="list-style-type: none"> • Discuss salivary gland diseases ○ Sialdenitis ○ Sialosis ○ Necrotizing sialometaplasia ○ Sarcoidosis ○ HIV-associated salivary gland disease ○ Salivary gland tumors 		C	Interactive lecture/ case based discussion					
9. Inflammatory overgrowths, developmental and benign lesions, and pigmentation of the oral mucosa							2	3(min of 0, max of3)
<ul style="list-style-type: none"> • Inflammatory overgrowths ○ Epulides ○ Fibroepithelial polyp ○ Denture granuloma ○ Focal epithelial hyperplasia (Heck's disease) 	Dr Fareed Ahmad	CA	Interactive lecture/SGD					
<ul style="list-style-type: none"> • Developmental lesions ○ Hamartomas • Developmental white lesions 		CA	Interactive lecture/SGD					
<ul style="list-style-type: none"> • Benign neoplasms • Squamous cell papilloma 		CA	Interactive lecture/SGD					
<ul style="list-style-type: none"> • Miscellaneous benign conditions ○ Traumatic keratoses ○ Nicotinic stomatitis (pipe smokers' palate) 		CA	Interactive lecture/SGD					

<ul style="list-style-type: none"> • Leukoedema 								
<ul style="list-style-type: none"> • Pigmentation of the oral mucosa ○ Amalgam tattoos ○ Melanotic pigmentation • Oral melanoma 		C	Interactive lecture/SGD					
10. Precancerous Lesions and Conditions							2	3(min of 0, max of 3)
<ul style="list-style-type: none"> • Precancerous lesions ○ Leukoplakia ○ Erythroleukoplakia ○ Speckled leukoplakia ○ Candidal leukoplakia (chronic hyperplastic candidosis) ○ Malignant transformation of precancerous lesions ○ Management of precancerous lesions 	Dr. Muhammad Shairaz Sadiq	CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> • Precancerous conditions ○ Oral submucous fibrosis (OSF) ○ Sidropenic dysplasia ○ Lichen planus 		CPA	Interactive lecture/case-based discussion/ Clinics					

<ul style="list-style-type: none"> • Other precancerous conditions 								
<ul style="list-style-type: none"> • Oral carcinoma and carcinogenesis ○ Aetiological factors for oral squamous cell carcinoma ○ Clinical features and diagnosis of oral carcinoma ○ Staging systems for oral carcinoma ○ The management of oral carcinoma ○ Prevention of oral carcinoma • Oral carcinoma as a genetic disease 		CPA	Interactive lecture/case-based discussion/ Clinics					
11. Mucocutaneous disease and connective tissue disorders							1	3(min of 0, max of 3)
<ul style="list-style-type: none"> • Mucocutaneous disease 		C	Interactive lecture					
<ul style="list-style-type: none"> • Lichen planus and lichenoid reactions 		CPA	Interactive lecture/case based discussions/ clinical session					
<ul style="list-style-type: none"> • Immunobulbous diseases ○ Pemphigus ○ Pemphigoid ○ Dermatitis herpetiformis • Linear IgA disease 	Dr Fareed Ahmad	CA	Interactive lecture/case-based discussion					

<ul style="list-style-type: none"> • Epidermolysis bullosa 		C	Interactive lecture					
<ul style="list-style-type: none"> • Erythema multiforme 		CA	Interactive lecture/SGD					
<ul style="list-style-type: none"> • Idiopathic oral blood blisters (Angina bullosa Haemorrhagica) 		CA	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> • Connective tissue diseases <ul style="list-style-type: none"> ○ Lupus erythematosus ○ Morphoea and systemic sclerosis ○ Mixed connective tissue disease 		CA	Interactive lecture/small group discussion					
12. Gastrointestinal diseases							2(min of 0 , max of 2)	1(min of 0, max of 1)
<ul style="list-style-type: none"> • Coeliac disease (glutensensitive enteropathy) <ul style="list-style-type: none"> ○ Oral manifestation of celiac disease 		C	Interactive lecture					
<ul style="list-style-type: none"> • Inflammatory bowel disease (IBD) <ul style="list-style-type: none"> ○ Crohn's disease ○ Oral Crohn's disease ○ Orofacial granulomatosis ○ Ulcerative colitis • Stomatosis and inflammatory bowel disease 	Dr Muhammad Shairaz Sadiq	CA	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> • Gastro oesophageal reflux disorder (GORD) 		CA	Interactive lecture/small					

			1 group discussion					
13. Blood and nutrition, endocrine disturbances, and renal disease							2(min of 0, max of 2)	1(min of 0, max of 1)
<ul style="list-style-type: none"> • Disorders of the blood ○ Anaemias ○ Oral signs and symptoms in anaemia ○ Management of patients with anaemias and haematinic deficiencies ○ Leukemia ○ Leukopenia ○ Myelodysplastic syndrome ○ Platelet abnormalities ○ The selection of patients for haematological examination 	Dr Muhammad Shairaz Sadiq	C	Interactive lecture					
<ul style="list-style-type: none"> • Disorders of nutrition ○ Nutritional deficiencies • Scurvy 		C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> • Endocrine disturbances ○ Normal endocrine changes ○ Adrenocortical diseases ○ Thyroid disease • Diabetic mellitus 		CA	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> • Renal disease 		CA	Interactive lecture/small					

<ul style="list-style-type: none"> ○ Chronic renal failure ○ Renal patients undergoing dialysis ● Renal transplant patients 			1 group discussion					
14. Immunodeficiency, hypersensitivity, autoimmunity and oral reactions to drug therapy							1	1(min of 0, max of 1)
<ul style="list-style-type: none"> ● Immunodeficiency 	Dr Muhammad Shairaz Sadiq	C	Interactive lecture					
<ul style="list-style-type: none"> ● Hypersensitivity 		C	Interactive lecture					
<ul style="list-style-type: none"> ● Angioedema 		CA	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> ● C1 esterase inhibitor deficiency 		C	Interactive lecture					
<ul style="list-style-type: none"> ● Autoimmunity 		CA	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> ● Oral reactions to drug therapy ○ Spectrum of adverse reactions ○ Oral reactions o antibiotics ○ Oral reactions to steroids ○ Drug therapy and periodontal tissues ○ Fixed drug eruptions 		CA	Interactive lecture/small group discussion					

15. Facial Pain and neurological disturbances								2	1 (min of 0, max of 1)
<ul style="list-style-type: none"> • Facial pain: an overview ○ The nerve supply of the face ○ The evaluation of facial pain 	Dr Fareed Ahmad	C	Interactive lecture/case-based						
<ul style="list-style-type: none"> • Neuropathic pain ○ Trigeminal neuralgia ○ Glossopharyngeal neuralgia ○ Postherpetic neuralgia ○ Neuropathic pain secondary to other conditions 		C	Interactive lecture/case-based discussion						
<ul style="list-style-type: none"> • Migraine 	Dr Fareed Ahmad	CA	Interactive lecture/clinical sessions /small group discussion						
<ul style="list-style-type: none"> • Cluster headaches (periodic migrainous neuralgia/ migrainous neuralgia) 		CA	Interactive lecture/small group discussion						
<ul style="list-style-type: none"> • Tension type headache 		CA	Interactive lecture/small group discussion						
<ul style="list-style-type: none"> • Facial Pain: miscellaneous conditions ○ Giant cell arteritis (temporal arteritis/cranial arteritis) 		CA	Interactive lecture/clinical sessions /small group discussion						

<ul style="list-style-type: none"> ○ Auriculotemporal syndrome (Frey's syndrome) 								
<ul style="list-style-type: none"> ● Neurological disturbances ○ Facial nerve deficits ○ Anaesthesia and paraesthesia ○ Bell's palsy ○ multiple sclerosis ○ Extrapyrmidal syndromes 			Interactive lecture/clinical sessions /small group discussion					
16. Temporomandibular disorders							2	1 (min of 0, max of 1)
<ul style="list-style-type: none"> ● Investigation of the stomatognathic system ○ History ○ Examination ○ Imaging ○ Arthroscopy 		CA	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> ● Temporomandibular pain and dysfunction syndrome (TMPDS) ○ Management 	Dr Fareed Ahmad	C	Interactive lecture					
<ul style="list-style-type: none"> ● Internal derangement ○ Disc displacement with reduction ○ Disc displacement without reduction 		CA	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> ● Rheumatoid arthritis 		CA	Interactive lecture/case-based discussion					

<ul style="list-style-type: none"> • Osteoarthrosis (osteoarthritis) 		C	Interactive lecture/ case-based discussion					
<ul style="list-style-type: none"> • Masseteric Hypertrophy 		C	Interactive lecture / case-based discussion					
<ul style="list-style-type: none"> • Tumors 		CPA	Interactive lecture/small group discussion/c ase-based discussion					
17. Psychogenic orofacial problems							2	1 (min of 0, max of 1)
<ul style="list-style-type: none"> • Chronic orofacial pain <ul style="list-style-type: none"> ○ Atypical facial pain ○ Atypical odontalgia ○ Oral dysaesthesia (Burning mouth syndrome) ○ Management of chronic orofacial pain 	Dr Fareed Ahmad	CPA	Interactive lecture/ small group discussion					
<ul style="list-style-type: none"> • Disturbances in taste and salivation 		C	Interactive lecture/case-based discussion					

<ul style="list-style-type: none"> • Dysmorphophobia 		C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> • Self-injurious behavior 		C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> • Eating disorders 		C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> • Drugs and Alcohol 		C	Interactive lecture/case-based discussion					
18. Disorders of teeth and bone							2	1 (min of 0, max of 1)
<ul style="list-style-type: none"> • Disorders of teeth <ul style="list-style-type: none"> ○ Hypodontia ○ Variation in eruption ○ Variation in size of teeth ○ Non carious tooth surface loss ○ Discoloration of the teeth ○ Disturbances of the structure and enamel and dentine 	Dr Muhammad Shairaz Sadiq	C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> • Disorders of bone <ul style="list-style-type: none"> ○ Inherited and development disturbances 		C	Interactive lecture/small group discussion					

<ul style="list-style-type: none"> ○ Metabolic and endocrine disturbances ○ Disorders of unknown aetiology paget's disease 								
19. Medical emergencies in dentistry							2	1
<ul style="list-style-type: none"> ● The prevention of medical emergencies 	Dr Fareed Ahmad	CA	Interactive lecture/small group discussion/role plays					
<ul style="list-style-type: none"> ● Administration of drugs ○ Routes of administration of drugs 		CA	Interactive lecture/small group discussion/role plays					
<ul style="list-style-type: none"> ● Emergency drugs and equipment 		CA	Interactive lecture/small group discussion/role plays					
<ul style="list-style-type: none"> ● Management of emergencies 		CAP	Interactive lecture/small group discussion/role plays					

Learning resources

<u>Topic</u>	<u>Resources</u>
The Oral Mucosa	Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman. Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3 rd Edition, by Crispian Scully. Medical Problems in Dentistry, 6th Edition, by Crispian Scully. A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.
Principles of oral medicine: assessment and investigation of patients	Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman. Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3 rd Edition, by Crispian Scully. Medical Problems in Dentistry, 6th Edition, by Crispian Scully. A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.

Therapy	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Infections of gingivae and oral mucosa	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Oral Ulceration	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Diseases of the lips and tongue and disturbances of taste and halitosis	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Swellings of the face and neck	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p>

	<p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Salivary glands and saliva	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Inflammatory overgrowths, developmental and benign lesions, and pigmentation of the oral mucosa	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Precancerous lesions and conditions. Oral carcinoma and carcinogenesis	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Mucocutaneous disease and connective tissue disorders	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p>

	<p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Gastrointestinal diseases	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Blood and nutrition, endocrine disturbances, and renal disease	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Immunodeficiency, hypersensitivity, autoimmunity and oral reactions to drug therapy	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Facial Pain and neurological disturbances	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>

Temporomandibular disorders	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Psychogenic orofacial problems	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Disorders of teeth and bone	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Oral and Maxillofacial Medicine, the Basis of Diagnosis and Treatment, 3rd Edition, by Crispian Scully.</p> <p>Medical Problems in Dentistry, 6th Edition, by Crispian Scully.</p> <p>A Clinical guide to Oral Medicine by P J Lamely & M A O Lewis.</p>
Medical emergencies in dentistry	<p>Tyldesley's Oral Medicine, 5th Edition, by Anne Field & Lesley Longman.</p> <p>Contemporary Oral and Maxillofacial surgery 6th Edition by James R. Hupp, Edward Ellis III, Myron R. Tucker</p>

OTHER LEARNING RESOURCES

<u>Clinics / Practical</u>	Students will be involved in clinical work in the clinics of Oral Medicine and diagnosis
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<u>Videos</u>	Videos to familiarize the students with the procedures and protocols to assess patients.
<u>Computer Lab/CSs/DVDs/ Internet Resources:</u>	To increase the knowledge, students should utilize the available internet resources and CDs/ DVDs. This will be an additional advantage to increase learning.
<u>Self-Learning</u>	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.

ASSESSMENT METHODS:

Internal Assessment (IA)

- a. Weightage of internal assessment shall be 10 %, each for theory and practical, in BDS Professional Examination.
- b. The Internal Assessment shall comprise of monthly test / PBL / assignments / Clinical tests / clinical vivas etc
- c. The Internal Assessment record shall be kept in the respective department of the College / Institute and after approval of Principal, a summary as per University registration number shall be furnished to the Controller of Examinations, at least two weeks before the commencement of final examination.
- d. The result of all the class tests / tools which contribute towards IA will be displayed to the students during an academic year.
- e. The same internal assessment shall be counted both for annual and supplementary examinations. The students who are relegated, however, can improve the internal assessment during subsequent year
- f. Internal assessment tools of any subject may be changed after the approval of respective FBS

Annual Examination

- a. The weightage of Annual Examination shall be 90%, each for theory and practical, in BDS.
- b. The examination comprises of a theory paper and practical/clinical examinations as per PM&DC regulations and the Table of Specifications (TOS) of the University.
- c. The gap between two consecutive theory papers shall not be more than two days.
- d. The Theory Paper shall be of 2-hours duration, held under the arrangements of the university. It shall have two parts; MCQs (30%) and SAQs/SEQs (70 %) for the year 2018. It may be changed after the approval of Academic Council.
- e. Allocated time for MCQs for 2021-22 shall be as under:

20 MCQs	-	25 Minutes
25 MCQs	-	30 Minutes

30 MCQs - 40 Minutes
 40 MCQs - 50 Minutes
 45 MCQs - 60 Minutes

- f. Each MCQs shall have four distractors
 g. The distribution of SAQs/SEQs as well as MCQ difficulty levels for BDS annual examinations is as under: -

Third Professional BDS Examination (2021) Oral Medicine

Time Allowed =01 Hr. and 30 Min. *(Including MCQs)*

Marks of theory paper =40

Internal assessment =10

Total marks =50

Pass Marks =25

20 x MCQs (20 Marks) Time =25 Minutes

Q. No. 1,2,3,4,5,6,7

2 x SAQs/SEQs (Recall) = 03 marks each

4 x SAQs/SEQs (Application) = 2 x 04 marks, 2 x 03 marks each

Total Marks (20 Marks) Time = 1 hour & 5 mins

S.No	Topic	NUMBER OF MCQs (20) Recall : 04 Application : 16 1 mark each	NUMBER OF SAQs/SEQs (06)
1.	Principles of oral medicine: assessment and investigations of patient	02	02
2.	Bacterial, Viral, & fungal infections of gingiva and oral mucosa		
3.	Oral ulcerations	02	
4.	Diseases of lips and tongue		
5.	Swellings of face and neck	02	

6.	Salivary glands diseases and disturbances of salivary flow.		
7.	Oral pigmentation & Inflammatory overgrowths	01	
8.	Precancerous lesions and conditions	01	01
9.	Oral Carcinoma & Carcinogenesis	01	
10.	Vesiculobullous diseases and connective tissue disorders	01	
11.	Oral manifestations of systemic diseases (Blood, GIT, Nutritional, Renal, Endocrine related) & Their management.	02	02
12.	Orofacial, Neurologic & Psychogenic Pain	02	
13.	Facial Paralysis		
14.	Temporomandibular disorders	02	
15.	Immunity and oral reactions to drug therapy	01	
16.	Disorders of teeth and bone	01	
17.	Osteochemonecrosis of jaws		
18.	Management of medical emergencies in dentistry	02	01
Total		20 (20 Marks)	06 (20 Marks)

Internal Assessment Calculation (Theory Annual)

A	B	C	D
Roll No.	Name	All Modules/ Pre annual Exams or any other exam	Total Marks of internal Assessment out of 20
Total Marks		Sum of Marks obtained x 20 / sum of total marks in all exams	

Table of specifications for Annual Professional Exam: Practical Clinical Assessment

Total	= 50
OSPE	= 18
VIVA	= 18
Log Book	= 04
<i>Internal Assessment</i>	<i>= 10</i>

OSPE (20 Marks)			
	Stations	Marks	Time
Static Stations	5	5x2=10	2 min each station
Interactive Stations	2	2x4=8	4 min each station

Internal Assessment Calculation (Practical)

A	B	C	D
Roll No.	Name	OSPE/ Practical Class tests though out the year/ Pre annual Practical Exams or any other exam	Total Marks of internal assessment Out of 20
Total Marks		Sum of marks obtained x 20 / sum of total marks in all exams	

Internal Examiner

He/she shall be Professor and Head of Department who has been involved in teaching of the class being examined for at least six months and has delivered 50% of the total lectures. Second preference shall be Associate/Assistant Professor who is involved in teaching of the class and posted there for one year. Third preference shall be a recognized Professor of the subject.

External Examiner

He/she shall be a Professor/Associate Professor of a recognized Medical/Dental College or at least an Assistant Professor with three years teaching experience in the relevant subject.

Conflict of Interest

No person shall serve as an examiner whose close relative (wife, husband, son, daughter, adopted son, adopted daughter, grand-son, grand-daughter, brother, sister, niece /nephew, son and daughter- in-law brother and sister- in-law, parental and maternal uncle and aunt etc.) is appearing in the examination. All examiners likely to serve as an examiner shall render a certificate in compliance to this para.

Paper Setting

- a. Each College / Institute shall forward a set of two question papers as per TOS along with the key for each subject to the Controller of Examinations, at least three months in advance of the annual examination. The question paper as a whole / a question without a comprehensive key shall not be considered towards final paper setting.
- b. The set of question papers shall be prepared by the respective Head of Department (HoD) and furnished to Controller of Examinations through Head of Institution (HoI)
- c. The Controller of Examinations shall approve the faculty for the final paper setting having fair representation of each college / institute.

Paper Assessment

- a. The Controller of Examinations shall approve the faculty for the theory paper marking, to be undertaken in the manner as deemed appropriate.
- b. The Examination Directorate shall coordinate directly with the faculty, earmarked for the paper marking
- c. A student who scores 85% and above marks in any subject shall qualify for distinction in that particular subject.
- d. A fraction in aggregate marks of a subject shall be rounded off to whole number. If it is less than 0.5 then it will be rounded off to the previous whole number while 0.5 or more will be rounded off to the next whole number.

Practical / Clinical Examinations

- a. The Controller of Examiners shall approve the faculty to serve as the internal & external examiners.
- b. The number of external and internal examiners shall be equal.
- c. One external & internal examiner each shall be marked for a group of 100 students.

- d. Candidates may be divided into groups in the clinical and practical examinations and be standardized by incorporating clinical exam
- e. Practical/clinical examination shall be held after the theory examination of the subject but in special cases, it may be held before the theory examination with the approval of the Controller of Examinations. For the purpose of practical/clinical examination, the candidates may be divided into sub groups by the examiners.
- f. The assessment of the practical / clinical examination duly signed by internal & external examiner shall be furnished to the Controller of Examinations within one week of the conclusion of examination

Pass Marks

- a. Pass marks for all subjects less Islamic / Pakistan Studies, shall be 50 % in theory and practical, separately.
- b. Pass marks for Islamic / Pakistan Studies shall be 33 % which, however shall not be counted towards final scoring of the professional examination.
- c. No grace marks shall be allowed to any student in any examination.

Declaration of Result.

Every effort shall be made to declare the result of each examination within one month of the last practical examination or earlier.

Promotion.

No student shall be promoted to the higher classe unless he/she passes all the subjects of the previous class

Re-Totaling.

Any student may apply to the Controller of Examinations on a prescribed form along with the specified fee.

Supplementary Examination.

The interval between a supplementary examination and the previous professional examination shall not be more than two months. There shall be no special supplementary examination.