

Programme Structure

School of Dental Sciences

MDS

**(Oral & Maxillofacial Pathology and
Oral Microbiology)**

Programme Code: SDS0104

Batch: 2023-26

Programme Structure
School of Dental Sciences
Master of Dental Surgery (MDS)
Batch: 2023-2026

S. No.	Paper ID	Subject Code	Subjects	Teaching Load			
				L	T	P	
THEORY SUBJECTS							
•	MDS306	MDS306	Oral Pathology & Microbiology	0	3	45	CC
Practical/Viva-Voce/Jury							
•	MDS306	MDS306	Oral Pathology & Microbiology	0	3	45	CC

2.1 Module: Syllabus

School:		School of Dental sciences
Programme:		Master of Dental Surgery- Oral & Maxillofacial Pathology and Oral Microbiology
Batch		2023-2026
Course Code		MDS306
Credits		
Contact Hours (L-T-P)		NA
		0-3-45
1	Course Type	Compulsory (CORE)
2	Course Objective	<p>1.1 To train a post graduate student in the field of basic principles of biostatistics and study as applied to dentistry and research</p> <p>1.2 To develop a basic understanding of gross anatomy of head & neck, including histology, biology, biochemistry and physiology</p> <p>1.3 Basic understanding of pathologies affecting head and neck region</p> <p>1.4 Basic knowledge of oral microbiology and immunology</p> <p>2.1 To make post graduate student learn about pathologies of oral and maxillofacial region.</p> <p>2. 2 Knowledge of manifestations of common diseases, their diagnosis & pathogenesis.</p> <p>2.3 Student should know some basic aspects of Forensic Odontology.</p> <p>3.1 To make post graduate students learn about routine and special histological techniques</p> <p>3.2 To make student diagnose cancer cases by interpreting histopathological slides</p> <p>4.1 To train a post graduate dental surgeon so as to ensure higher competence in both general and special pathology dealing with the nature</p>

		of oral diseases, their causes, processes and effects. 4.2 He/ She is expected to present a scientific data pertaining to the field in the conferences both as poster and verbal presentations and to take part in group discussions.	
3	Course Outcomes	<p>The student will be able to:</p> <p>CO1 Understanding of research methodology</p> <p>CO2 Appreciate the normal development, morphology, structure and function of oral tissues.</p> <p>CO3 Understanding of pathologies affecting head and neck</p> <p>CO4 Professional honesty and integrity are to be fostered</p> <p>CO1 At the end of the course, student is expected to appreciate the normal development, morphology, structure and function of oral tissues & variations in different pathological/non-pathological states.</p> <p>CO2 Cytopathological, histopathological and microbiological diagnosis and interpretation of oral diseases.</p> <p>CO3 Screening and diagnosis of precancer and oral cancer</p> <p>CO1 At the end of the course, student is expected to have knowledge about all the special stains and advanced laboratory techniques.</p> <p>CO2 At the conclusion of course, student should be confident of diagnosing the histopathological slides.</p> <p>CO3 At the end of the course, student should be confident to diagnose oral cancer and precancer diseases.</p> <p>CO1 To make the student sound in diagnosing and treatment planning of challenging cases of oral precancer and cancer.</p> <p>CO2 To make the student develop communication skills to explain various treatment modalities to the patient.</p>	
4	Course Description	Under this course we teach students about basic anatomy and histology of oral cavity, a brief of research methodology, biochemistry and physiology of human body. We teach students a detailed description of all the oral precancerous, cancerous, vesiculobullous lesions, and all the lesions affecting the oral cavity. We ensure that post graduate students learn about routine staining techniques as well as special laboratory procedures which helps in arriving at diagnosis of various precancer and cancerous lesions.	
5	Outline syllabus		CO Mapping
	Unit 1		APPLIED BASIC SCIENCES
	A	Topic1	Bio-Statistics and Research Methodology, Applied Gross Anatomy of Head and Neck including Histology, Cell Biology, General Histology, Applied physiology, Applied Biochemistry
			CO1, CO4

	B	Topic 2	Applied General Pathology and General and Systemic Microbiology, Pathogenic mechanism at molecular level, Basic Immunology , Oral Biology (Oral and Dental Histology including Embryology and Oral Physiology)	CO2, CO3
	C	Topic3	Oral Biology (Oral and Dental Histology including Embryology and Oral Physiology) . Basic Molecular Biology and Genetics.	CO3, CO2
	UNIT 2		ORAL PATHOLOGY, MICROBIOLOGY, IMMUNOLOGY AND FORENSIC Odontology	
	A	Topic 1	Basic Oral Pathology Development disturbances of oral and para oral structures, Dental caries, Pulp and periapical pathology, Osteomyelitis, Periodontal diseases, Salivary gland diseases, Cysts of the oral and para oral region, Traumatic, reactive and regressive lesions of oral cavity, Pigmentation of oral and para oral region and discoloration of teeth, Microbial infections of oral soft tissues, Diseases of the bone and TMJ.	CO306.1.3, CO306.2.1
	B	Topic 2	Biopsy, Exfoliative cytology	CO2 CO3
	C	Topic 3	Principles of Basic Forensic Odontology, Oral Microbiology, Immunology	CO2, CO1, CO4
	UNIT 3		LABORATORY TECHNIQUES, DIAGNOSIS AND ONCOLOGY	

	A	Topic 1	Basic Histology techniques and Microscopy				CO2, CO1
	B	Topic 2	Oral Oncology				CO1, CO2
	C	Topic 3	Basic laboratory equipment's and lab maintenance, Recent Advances in Oral Pathology , Histopathology slide discussions				CO1
	UNIT 4		ESSAY				
	A	Topic 1	Benign and malignant tumors of oral cavity, Developmental disorders of oral and paraoral structures, Potentially malignant disorders, Bone pathology				CO3, CO2, CO1
	B	Topic 2	Odontogenic cysts and tumors, Pathology of salivary glands, Genodermatosis, Giant cell lesions				CO2, CO1
	C	Topic 3	Molecular pathology				CO1
1	Course evaluation	Attendance	Minimum 75% is needed for both theory and clinical/practical				
		Quizzes	Taken every 2 months				
		Presentations	Seminars, Journal Clubs, Case presentations, Thesis and Library Dissertation presentations				
		Any Other	Project based learning, flip learning, Assignments				
		End Term Examinations	700 Marks	Theory	1 st year - 100 Marks	3 rd year-300 marks	
				Practical		3 rd year-300 Marks	
2	Text book/s*	Orbans, Tencate, Berkowitz, Robin's and Cotran's, Wheelers, Bancroft, Shafers, Neville, Regezi and Scuba, Fletcher, Cullings					
3	Other References	TED learning EBSCOHST Various scientific articles from various sources					

Mapping

Cos	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4
CO306.1.1	-	1	-	3	3	2	1	-	-	-	-
CO306.1.2	-	1	-	3	3	3	1	-	-	-	-
CO306.1.3	-	2	-	2	3	1	1	-	-	-	-
CO306.1.4	-	2	-	3	2	1	2	-	-	-	-
CO306.2.1	3	3	3	1	2	1	1	3	3	3	2
CO306.2.2	2	2	2	2	2	1	2	3	2	1	3
CO306.2.3	3	3	3	2	1	2	2	2	2	2	3
CO306.3.1	3	3	3	2	2	2	2	3	3	3	1
CO306.3.2	2	2	3	2	1	1	3	2	2	2	2
CO306.3.3	2	1	2	2	2	2	2	3	2	2	2
CO306.4.1	-	1	2	3	1	1	2	-	3	2	1
CO306.4.2	-	2	1	2	2	2	1	-	2	1	2

1-Slight (Low)

2-Moderate (Medium)

3-Substantial (High)