Programme Structure

School of Dental Sciences
MDS
(Oral & Maxillofacial Surgery)

Programme Code: SDS0108

Batch :2024-2027

1.1 Vision, Mission and Core Values of the University

Vision of the University

To serve the society by being a global University of higher learning in pursuit of academic excellence, innovation and nurturing entrepreneurship.

Mission of the University

1. Transformative educational experience
2. Enrichment by educational initiatives that encourage global outlook
3. Develop research, support disruptive innovations and accelerate entrepreneurship
4. Seeking beyond boundaries

Core Values

1. Integrity
2. Leadership
3. Diversity
4. Community

Vision of the School

To serve the society by being a global center in pursuit of academic and professional excellence in the field of dentistry.

Mission of the School

1. Creating a stimulating and flexible learning environment amongst the faculty and students
2. Strongly promoting research, innovation, clinical excellence
3. Promote and inculcate ethical values and continued betterment in the dental profession and in all facets of life.

Core Values

1. Integrity
2. Leadership
3. Diversity
4. Community

1.3 Programme Educational Objectives (PEO)

PEO1: To train a post-graduate student to have adequate knowledge and understanding of the etiology, pathophysiology and diagnosis, treatment planning of various common oral and Maxillofacial surgical problems both minor and major in nature.

PEO2: To have understood the general surgical principles like pre and post- surgical management, particularly evaluation, post- surgical care, fluid and electrolyte management, blood transfusion and post- surgical pain management.

PEO3: Understanding of basic sciences relevant to practice or oral and maxillofacial surgery.

PEO4: Able to identify social, cultural, economic, genetic and environmental factors and their relevance to disease process management in the oral and Maxillofacial region.

PEO5: Essential knowledge of personal hygiene and infection control, prevention c cross infection and safe disposal of hospital waste keeping in view the high prevalence of hepatitis and HIV.

1.3.2 Programme Articulation Matrix:

PEO Statements	School Mission 1	School Mission 2	School Mission 3
PEO1:	**3**	**2**	**2**
PEO2:	**3**	**1**	**3**
PEO3:	**3**	**3**	**3**
PEO4:	**3**	**1**	**3**
PEO5:	**3**	**3**	**2**

1. Slight (Low) 2. Moderate (Medium) 3. Substantial (High)

PO1 : To obtain proper clinical history, methodical examination of the patient, perform essential diagnostic procedures and order relevant laboratory tests and interpn them and to arrive at a reasonable diagnosis about the surgical condition.

PO2 : To perform with competence minor oral surgical procedures and common maxillofacial surgery. To treat both surgically and medically (or by other means of the oral and Maxillofacial and the related area).

PO3 : Capable of providing care for maxillofacial surgery patients.

PO4 : Develop attitude to adopt ethical principles in all aspect of surgical practice, professional honesty and integrity are to be fostered. Surgical care is to be delivered irrespective of the social status, caste, creed or religion of the patient.

PO5 : To share the knowledge and clinical experience with professional colleagues

PO6 : To adopt new and techniques of surgical management developed from time to time based on scientific research which are in the best interest of the patient

PO7 : Professional honesty and integrity to be fostered.

PSO1: acquired adequate knowledge and understanding of the etiology, patho physiology and diagnosis, treatment planning of various common oral and Maxillofacial surgical problems both minor and major in nature.

PSO2: to identify social, cultural, economic, genetic and environmental factors and their relevance to disease process management in the oral and Maxillofacial region.

PSO3: Able to do mass screening of oral cancer patients

PSO4: Competency to analyze and interpret routine blood investigations

1.3.4 Programme Articulation Matrix:

	PEO1	PEO2	PEO3	PEO4	PEO5
PO1	3	2	2	2	2
PO2	3	2	2	2	1
PO3	2	2	3	2	1
PO4	2	2	2	2	3
PO5	2	2	2	2	3
PO6	2	2	2	1	2
PO7	1	1	1	1	1
PSO1	2	2	3	1	1
PSO2	3	1	3	3	2
PSO3	1	3	3	2	2
PSO4	1	1	1	1	1

1. Slight (Low) **2. Moderate (Medium)** **3. Substantial (High)**

1.3.5 Programme Articulation Matrix:

PROGRAMME OUTCOME COURSES	COURSE NAMES	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	Applied Basic Sciences	-	1	-	3	3	2	1	-	-	-	-
CO2		-	1	-	3	3	2	1	-	-	-	-
CO3		3	3	3	1	2	1	1	3	3	3	2
CO1	Minor Oral Surgery and Trauma	3	3	3	1	2	1	1	3	3	3	2
CO2		1	1	2	1	1	2	-	3	2	1	1
CO1	Maxillofacial surgery	3	3	3	2	2	2	2	3	3	3	1
C02		1	3	2	1	3	2	-	3	2	1	1
CO1	Long Essay	2	2	2	1	2	2	1	2	2	1	1
CO2		1	1	2	1	1	2	1	3	3	1	1

1. Slight (Low) **2. Moderate (Medium)** **3. Substantial (High)**

Programme Structure

School of Dental Sciences
Master of Dental Surgery (MDS)
Batch: 2024-2027

S. No.	Paper ID	Subject Code	Subjects	Teaching Load			Type of Course:
				L	T	P	1. CC 2. AECC 3. SEC 4. DSE
THEORY SUBJECTS							
1.	MDS303	MDS303	Oral & Maxillofacial Surgery	**0**	**3**	**45**	**CC**
Practical/Viva-Voce/Jury							
2.	MDS303	MDS303	Oral & Maxillofacial Surgery	**0**	**3**	**45**	**CC**

2.1 Module Syllabus

School:		**School of Dental Sciences**
Program:		**Master Of Dental surgery**
Batch		**2024-2027**
1	Course Code	MDS303
2	Course Title	**Oral & Maxillofacial Surgery**
3	Credits	NA
4	Contact Hours (L-T-P)	0-3-45
	Course Type	CC
5	Course Objective	1. To train a post-graduate student to have adequate knowledge and understanding of the etiology, patho physiology and diagnosis, treatment planning of various common oral and Maxillofacial surgical problems. 2. To have understood the general surgical principles. 3. Understanding of basic sciences relevant to practice or oral and maxillofacial surgery. 4. Essential knowledge of personal hygiene and infection control. 5. Essential knowledge of personal hygiene and infection control
6	Course Outcomes	The student will be able to: CO1: Student should know about Development and growth of face, teeth and jaws, Age changes and evaluation of mandible in detail Congenital abnormality of orofacial regions Surgical anatomy of scalp, temple and face CO2: Anatomy and its applied aspects of triangles of neck and deep structures of neck, Cranial facialbones and surrounding soft issues. Cranial nerves, Tongue, Temporal and infratemporal region and temporomandibular joint in detail Orbits and its contents, Muscles of face and neck. CO3: Histology of skin, oral mucosa, connective tissue bone, cartilage, cellular elements of blood vessels,

		Lymphatic, Nerves, Muscles. CO1: Endocrinology - metabolism of calcium, endocranial activity and disorder relating thyroid gland,parathyroid gland, adrenal gland, pituitary gland, pancreas and gonads CO2: Nutrition – general principles balanced diet, effect of dietary deficiency, protein energy malnutrition, nutritional assessment, metabolic responses to stress, need for nutritional support, entrails nutrition, roots of access to GIT, parenteral nutrition, access to central veins, nutritional support CO1: Fluid and electrolytic balance / acid base metabolism– the body fluid compartment, metabolism ofwater and electrolytes, factors maintaining hemostasis causes for treatment of acidosis and alkalosis. CO2: Wound management - wound healing factors influencing healing, properties of suture materials, and appropriate uses of sutures.CO 303.4.1: The students would be able to diagnose, meticulously plan and manage competently various conditions in maxillofacial surgery including challenging cases. CO1 The students would be able to diagnose, meticulously plan and manage competently variousconditions in maxillofacial surgery including challenging cases. CO2: Students would be knowledgeable about conventional and recent advances in the diagnosis andmanagement of oral and maxillofacial conditions
7	Course Description	Oral and Maxillofacial surgery deal with the diagnosis, surgical and adjunctive treatment of diseases, injuries and defects of the human jaws and associated oral and facial structures. It is also a surgery to treat many diseases, injuries and defects in the head, neck, face, jaws and the hard and soft tissues of the oral (mouth) and maxillofacial (jaws and face) region. The course helps to develop skilled professionals in diagnosis, surgical and adjunctive treatment of disease,injuries, defects of the human jaws and associated oral and facial structures.

8	Outline syllabus			CO Mapping
	UNIT 1	**Applied Basic Sciences:**		
	A	**Topic 1**	**Applied Anatomy- Surgical anatomy of scalp, temple and face anatomy and its appliedaspects, Applied Physiology - General consideration of the structure and function, brain and applied anatomy of intracranial venous sinuses, cavernous sinus and superior sagittalsinus, Brief consideration of autonomous nervous system of head and neck. Applied Biochemistry - General principles governing the various biological principles ofthe body such as osmotic, pressure, electrolytes, dissociation, oxidation, reduction etc, general composition of body enzymes and antimetabolite**	**CO 303.1.1**
	B	**Topic 2**	**Applied General Pathology - Wound management, Hypersensitivity, Shock and pulmonary failure, types of shock, diagnosis, resuscitation, pharmacological support,ARDS and its causes and prevention, ventilation and support. Applied Oral Pathology and microbiology - Wide range of pathological lesions of hardand soft tissues of the Orofacial regions like the odontogenic infection, maxillary sinus diseases, mucosal diseases, role of laboratory investigation in oral surgery.**	**CO 303.1.1**
	C	**Topic 3**	**Applied Pharmacology and therapeutics - Dosage and mode of administration of drugs,action and fate in the body. Applied Computer science - The value of computer based systems in biomedicalequipment. ORAL AND MAXILLOFACIAL SURGERY - Evolution of Maxillofacial surgery, Diagnosis, history taking, clinical examination, investigations, Informed consent/medico-legal issues, Principles of surgery, Pre operative workup, Surgical sutures, drains, Postoperative care.**	**CO 303.3.1**

UNIT 2	**ORAL AND MAXILLOFACIAL SURGERY – Minor**		
A	**Topic 1**	**Communication skills with patients, Principles of evidence-based surgery, Medical emergencies, Common cysts and Tumors. Airway obstruction management, Facial pain, Pain control**	**CO 303.4.1**
B	**Topic 2**	**Temporomandibular joint disorders. Clinical oral surgery, Pre-prosthetic surgery, Maxillofacial trauma, Assessment of trauma General patient management, Cyst and tumors of head and neck region and their management, Surgical Infections**	**CO 303.4.2**
C	**Topic 3**	**Distraction osteogenesis in maxillofacial region, Implantology principles, Allied specialties - Neurosurgery, ENT/ Ophthalmology, Orthopedics,**	**CO 303.4. 1, CO 303.3.2**

Unit 3	**ORAL & MAXILLOFACIAL SURGERY – Major**		
A	**Topic 1**	**Principles of surgical audit, Tissue grafting, Laser surgery**	**CO1,CO2**
B	**Topic 2**	**Cleft lip and palate surgery, Aesthetic facial surgery**	**CO2**
C	**Topic 3**	**Craniofacial surgery, Micro vascular surgery**	**CO3,CO2**

1.	Course evaluation	Attendance		Minimum 75% is Needed for both theory and clinical practical	
		Discussions		Every week	
		Presentations		Seminar, Journal Club, Case Presentations	
		Any Other		Posters	
		Annual examination	(700 Marks Theory and Practical)	1st year theory – 100 marks	3rd year theory – 300marks
					3rd year practical – 300 marks

2.	**Text book/s***	**1. Local anesthesia – Malamed** **2. Text book of Oral & Maxillofacial Surgery – Laskin Vol. 1 & 2** **3. Principles of Oral & Maxillofacial Surgery – Peterson Vol. 1 & 2** **4. Maxillofacial Injuries – Row & Williams Vol.1 & 2** **5. Maxillofacial Trauma Fonseca Vol. 1 &2** **6. Maxillofacial Infections – Topazian** **7. Principles of Oral & Maxillofacial Surgery – Moore** **8. Facial esthetics & Dentofacial deformities – Epker Vol 1 to 4**	**Stanley F. Malamed** **Daniel M. Laskin** **Peterson** **N.L Rowe & J.L.I. Williams** **Fonseca** **Topazian** **Moore** **Bruce N. Epker**

3.	**SUGGESTED PERIODICALS**	**1. Journal of Oral & Maxillofacial Surgery** **2. British Journal of Oral & Maxillofacial Surgery** **3. International Journal of Oral & Maxillofacial Surgery**	
4.	**Other References**	**TED learning** **EBSCOHOST** **Various scientific articles from various sources**	

PROGRAM OUTCOME COURSES	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	PSO4	PSO5
CO 303.1.1	-	1	-	3	3	2	1	-	-	-	-
CO 303.1.2	-	1	-	3	3	2	1	-	-	-	-
CO 303.1.3	3	3	3	1	2	1	1	3	3	3	2
CO 303.2.1	3	3	3	1	2	1	1	3	3	3	2
CO 303.2.2	1	1	2	1	1	2	-	3	2	1	1
CO 303.3.1	3	3	3	2	2	2	2	3	3	3	1
C0 303.3.2	1	3	2	1	3	2	-	3	2	1	1
CO 303.4.1	2	2	2	1	2	2	1	2	2	1	1
CO 303.4.2	1	1	2	1	1	2	1	3	3	1	1

1-Slight (Low)

2-Moderate (Medium)

3-Substantial (High)