

## **Programme Structure**

School of Dental Sciences

MDS

(Oral & Maxillofacial Surgery)

**Programme Code: SDS0108** 

Batch: 2023-2026





## **Programme Structure**

## School of Dental Sciences Master of Dental Surgery (MDS) Batch: 2023-2023

| S.       |                          |        | Subjects                     | ŗ | <b>Teaching</b> | Load | Type of Course:                      |  |  |
|----------|--------------------------|--------|------------------------------|---|-----------------|------|--------------------------------------|--|--|
| No.      |                          | Code   |                              | L | Т               | P    | 1. CC<br>2. AECC<br>3. SEC<br>4. DSE |  |  |
| THEO     | RY SUBJEC                | CTS    |                              |   |                 |      | •                                    |  |  |
| 1.       | MDS303                   | MDS303 | Oral & Maxillofacial Surgery | 0 | 3               | 45   | CC                                   |  |  |
| Praction | Practical/Viva-Voce/Jury |        |                              |   |                 |      |                                      |  |  |
| 2.       | MDS303                   | MDS303 | Oral & Maxillofacial Surgery | 0 | 3               | 45   | CC                                   |  |  |





## 2.1 Module Syllabus

| Scho | ool:         | School of Dental Sciences   |  |  |  |  |  |  |  |  |
|------|--------------|---|--|--|--|--|--|--|--|--|
| Prog | gram:        | Master Of Dental surgery  |  |  |  |  |  |  |  |  |
| Bato | eh e         | 2023-2026   |  |  |  |  |  |  |  |  |
| 1    | Course Code  | MDS303  |  |  |  |  |  |  |  |  |
| 2    | Course Title | Oral & Maxillofacial Surgery  |  |  |  |  |  |  |  |  |
| 3    | Credits      | NA  |  |  |  |  |  |  |  |  |
| 4    | Contact      | 0-3-45  |  |  |  |  |  |  |  |  |
|      | Hours        |   |  |  |  |  |  |  |  |  |
|      | (L-T-P)      |   |  |  |  |  |  |  |  |  |
|      | Course Type  | CC  |  |  |  |  |  |  |  |  |
| 5    | Course       | 1. To train a post-graduate student to have adequate knowledge and understanding of the etiology, patho                 |  |  |  |  |  |  |  |  |
|      | Objective    | 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       | The student will be able to:  |  |  |  |  |  |  |  |  |
|      | Outcomes     | 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 |  |  |  |  |  |  |  |  |
|      |              | 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.  |  |  |  |  |  |  |  |  |
|      |              | John in detail office and its contents, frascies of face and neek.  |  |  |  |  |  |  |  |  |
|      |              | CO3: Histology of skin, oral mucosa, connective tissue bone, cartilage, cellular elements of blood vessels,             |  |  |  |  |  |  |  |  |

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| 1     | P. P. S. |



|   |                       | 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 various conditions 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<br>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<br>Mapping |
|---|------------------|---------|--|---------------|
|   | UNIT 1           |         |  |               |
|   |                  | Applied | Basic Sciences:  |               |
|   | A                | Topic 1 | Applied Anatomy- Surgical anatomy of scalp, temple and face anatomy and its applied aspects, Applied Physiology - General consideration of the structure and function, brain and applied anatomy of intracranial venous sinuses, cavernous sinus and superior sagittal sinus, Brief consideration of autonomous nervous system of head and neck. Applied Biochemistry - General principles governing the various biological principles of the body such as osmotic, pressure, electrolytes, dissociation, oxidation, reduction etc, general composition of body enzymes and antimetabolite | CO1           |
|   | В                | 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.   | CO1           |
|   | С                | 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 biomedical equipment. 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.  | CO1           |



| UNIT 2 |         |  |             |
|--------|---------|--|-------------|
|        | ORAL A  | ND 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   | CO1         |
| В      | 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 | CO2         |
| С      | Topic 3 | Distraction osteogenesis in maxillofacial region, Implantology principles, Allied specialties - Neuro-surgery, ENT/ Ophthalmology, Orthopaedics,   | CO1,<br>CO2 |

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

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|    |                   | Attendance   |   | Minimum 75% is Needed for both theory and clinical practical  |   |   |  |  |  |
|----|-------------------|--|---|---|---|---|--|--|--|
|    |                   | Discussions  |   | Every week  |   |   |  |  |  |
|    |                   | Presentations  | 5   | Seminar, Journal Club, Case Pres  | sentations  | S   |  |  |  |
| 1. | Course evaluation | Any Other  |   | Posters   |   |   |  |  |  |
|    |                   | Annual examination   | (700 Marks<br>Theory  | 1st year theory – 100 marks   | st year theory – 100 marks 3 <sup>rd</sup> year theory – 300marks |   |  |  |  |
|    |                   | I  |   |   | 3 <sup>rd</sup> year  | practical – 300 marks   |  |  |  |
| 2. | Text book/s*      | <ol> <li>Text I</li> <li>Prince</li> <li>Maxi</li> <li>Maxi</li> <li>Maxi</li> <li>Prince</li> </ol> | iples of Oral &<br>illofacial Injur<br>illofacial Trau<br>llofacial Infect<br>iples of Oral & | Malamed  Maxillofacial Surgery – Laskin V  Maxillofacial Surgery – Peterson  Ties – Row & Williams Vol.1 & 2  ma Fonseca Vol. 1 & 2  Tions – Topazian  Maxillofacial Surgery – Moore  Dentofacial deformities – Epker Vol | Vol. 1  | Stanley F. Malamed Daniel M. Laskin  Peterson N.L Rowe & J.LI. Williams Fonseca Topazian Moore Bruce N. Epker |  |  |  |



|    |                          | wo mahariba acits   |
|----|--------------------------|---|
| 3. | SUGGESTED<br>PERIODICALS | <ol> <li>Journal of Oral &amp; Maxillofacial Surgery</li> <li>British Journal of Oral &amp; Maxillofacial Surgery</li> <li>International Journal of Oral &amp; Maxillofacial Surgery</li> </ol> |
| 4. | Other References         | TED learning  EBSCOHOST  Various scientific articles from various sources   |





| PROGRAM<br>OUTCOME | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|--------------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| COURSES            |     |     |     |     |     |     |      |      |      |      |      |
| 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)