## PACIFIC DENTAL COLLEGE AND HOSPITAL, DEBARI, UDAIPUR

## ORAL AND MAXILLOFACILA SURGERY

## **MDS CURRICULUM**

Curriculum for the Master of Dental Surgery (MDS) in Oral and Maxillofacial Surgery at Pacific Dental College & Hospital, Debari is a comprehensive program designed to produce highly skilled specialists capable of managing complex conditions of the oral and maxillofacial region. Below is an outline of the syllabus and key components.

# **Objectives**

The program aims to:

- 1. Provide in-depth knowledge of surgical and non-surgical management of conditions in the oral and maxillofacial region.
- 2. Develop advanced diagnostic, treatment planning, and surgical skills.
- 3. Train students in research methodology and academic teaching.
- 4. Prepare students to handle emergencies and manage complications.

# **Program Duration**

• 3 years of full-time training

# **Syllabus Overview**

The syllabus includes theoretical knowledge, clinical and practical training, and research work.

## 1. Theoretical Knowledge

The course covers a broad range of topics in-depth:

- **Basic Sciences** (with relevance to oral surgery)
  - o Anatomy, physiology, and pathology of the head and neck.
  - o Pharmacology and microbiology.
  - Biostatistics and research methodology.

# • Principles of Surgery

- o General surgical principles and asepsis.
- Wound healing and infection control.
- o Preoperative and postoperative management.

#### Anesthesia

- o Local anesthesia techniques and complications.
- o General anesthesia and sedation methods.
- o Management of emergencies in anesthesia.

#### • Trauma

- o Management of facial trauma (soft tissue, hard tissue, and dental trauma).
- o Fractures of the mandible, maxilla, zygoma, nasal bones, and orbit.
- o Management of avulsive injuries.

# • Oral and Maxillofacial Pathology

- Odontogenic and non-odontogenic cysts and tumors.
- Premalignant and malignant lesions.
- o Infections of the head and neck.

## • Orthognathic Surgery

- o Surgical correction of dentofacial deformities.
- Cephalometric analysis for surgical planning.

# • Temporomandibular Joint (TMJ) Disorders

- o Diagnosis and management of TMJ ankylosis, dislocations, and arthritis.
- o Arthroscopy and open joint surgeries.

## • Cleft and Craniofacial Surgery

- o Management of cleft lip and palate.
- Syndromic craniofacial anomalies.

# • Preprosthetic and Implant Surgery

- o Ridge augmentation and sinus lift procedures.
- Implant placement and complications.

#### Oncology

- o Diagnosis and management of oral cancer.
- o Resection, reconstruction, and rehabilitation.
- Chemotherapy and radiotherapy considerations.

# • Reconstructive Surgery

o Flap techniques (local, regional, and free flaps).

Microvascular reconstruction.

# • Aesthetic Surgery

- o Cosmetic procedures for the face.
- o Rhinoplasty, genioplasty, and facial contouring.

# • Miscellaneous Topics

- Salivary gland diseases.
- o Neurological disorders of the maxillofacial region.
- Management of medically compromised patients.

# 2. Clinical and Practical Training

#### Clinical Work

- Performing minor and major oral surgical procedures under supervision.
- Managing complex cases in maxillofacial trauma, TMJ disorders, and oncology.
- o Administering anesthesia (local and general).

## • Surgical Exposure

- Observing and assisting in advanced maxillofacial surgeries.
- o Independent handling of cases in the final year.

## • Case Management

- o Comprehensive diagnostic workup, treatment planning, and execution.
- o Managing preoperative, intraoperative, and postoperative care.

## • Emergency Management

 Handling maxillofacial emergencies like trauma, bleeding, and airway compromise.

## 3. Research and Academic Training

#### • Research Work

- o Conducting a research project and submitting a dissertation.
- o Participation in conferences, workshops, and seminars.

# Teaching Skills

o Involvement in teaching undergraduate students.

Preparing and delivering lectures.

#### Assessment

## • Formative Assessment

 Continuous evaluation through clinical work, seminars, journal clubs, and case presentations.

#### • Summative Assessment

- Final university examination includes:
  - Theory: Four papers covering basic sciences, applied aspects, and recent advances.
  - Clinical/Practical Exam: Performing and explaining surgical procedures.
  - Viva Voce: Assessing comprehensive knowledge and skills.

# **Recommended Reading**

- Textbooks on Oral and Maxillofacial Surgery, such as:
  - o "Peterson's Principles of Oral and Maxillofacial Surgery"
  - o "Fonseca's Oral and Maxillofacial Surgery"
  - o "Contemporary Oral and Maxillofacial Surgery" by Hupp, Ellis, and Tucker.