

List of Ph.D. Course work subjects that can be offered under  
Oral & Maxillofacial Surgery Group from 2026

<b>Oral &amp; Maxillofacial Surgery</b>							
Group I		Group II		Group III		Group IV	
Subject Code	Name of the subject	Subject Code	Name of the subject	Subject Code	Name of the subject	Subject Code	Name of the subject
<b>PHOM101</b>	Fracture in Maxillofacial Region of Facc	<b>PHOM201</b>	Post Traumatic Stress Evaluation Scale DSM-5	<b>PHOM301</b>	Mandibular Angle Fracture	<b>PHOM401</b>	Mini Plate & Screw System for Mandibular Fracture
<b>PHOM102</b>	Carcinoma of Head & Neck	<b>PHOM202</b>	Induction Immunotherapy in Oral Squamous Cell Carcinoma				

# **PHOM101: FRACTURE IN MAXILLOFACIAL REGION OF FACE**

## **Introduction to Facial trauma**

Basic principles of maxillofacial injuries: BLS (Basic Life Support), General care of injured patient

## **Etiology of Facial trauma**

RTA (Road Traffic Injuries), Violence- Domestic violence, Animal attacks, Sports injuries

Blast injuries: Gunshot injuries, Industrial injuries

## **Clinical Feature of mid facial fracture**

ZMC fracture: Vertical rotation, Horizontal rotation

Lefort fracture: I, II, III

## **Management of facial fracture**

In adult patients: Indirect and Direct Fixation, Point Fixation

In pediatric patients: Splinting techniques

## **Complication of facial fracture**

Intra operative – Haemorrhage, Injury to vital structures

Post Operative- Secondary Deformities of face:

Functional Deformity- Chewing difficulty, Occlusion variations

Esthetic Deformity- Scarring, Keloid

# **PHOM201: POST TRAUMATIC STRESS EVALUATION SCALE DSM-5**

## **Post-traumatic stress disorder in maxillofacial trauma:**

Introduction, incidence ,signs ,symptoms, Events (OMFS), Patterns of injury (OMFS), Types and subtypes of PTSD

## **Etiology of Post-traumatic stress disorder:**

Trauma, esthetics, function post trauma

## **Clinician administered scale for DSM-5**

History (head injury), Spinal injury, airway breathing, circulation, Diagnosis, Analysis of patient post trauma

## **Classification Post-traumatic Stress disorders:**

Acute, Chronic, Delayed onset

## **Pathophysiology of PTSD**

## **Evaluation of post-traumatic stress disorder:**

Stress reduction protocols, Life style modifications, Treatment specific related to trauma

# PHOM301: MANDIBULAR ANGLE FRACTURE

## 1. Surgical Anatomy of Mandible:

- a) Anatomy of TMJ
- b) Anatomy of Angle of Mandible
- c) Anatomy of Body of Mandible
- d) Anatomy of Symphysis and Parasymphysis of mandible

## 2. Principles of fracture healing

- a) Primary healing
- b) Secondary healing
- c) Malunion and fibrous union

## 3. Classification of Mandibular fracture:

- a) Condylar fracture
- b) Angle fracture
  - i. Favorable fracture: Vertical fracture, Horizontal fracture
  - ii. Unfavorable fracture: Vertical fracture, Horizontal fracture

## 4. Surgical Approaches to the Mandible:

- a) Extraoral approach to: Angle of mandible. Condyle of mandible. Ramus of mandible. Body of mandible. Symphysis and parasymphysis
- b) Intraoral approach:
  - i. submental approach: types of incision and flap design
  - c) Transbuccal approach

## 5. Fracture of Edentulous Mandible:

- a) Gunning splint
- b) Suspension wiring

## 6. Clinical Features of Mandibular fracture

- a) Condylar fracture
- b) Angle fracture
- c) Body fracture
- d) Symphysis and Parasymphysis fracture

# PHOM401: MINI PLATE & SCREW SYSTEM FOR MANDIBULAR FRACTURE

## 1. Hardware Design for mandibular fracture plating

Classification of plate

Type of plating design: Stainless steel plates, Titanium plates, Stainless steel wire

## 2. Screw system:

IMF screws, Self tapering screws, Monocortical screws, Bicortical screws, Bioresorbable screws

## 3. Plating system:

Mini plates, Dynamic compression plates (DCP), Eccentric compression plates (ECP), Locking plates, Bioresorbable plates

## 4. Open and closed reduction with internal fixation:

- a) Intermaxillary fixation (IMF): Erichs arch Bar, IV eyelet wiring, Risdon's Wiring, Gilmer's wiring, Essig's wiring,
- b) Transosseous wiring

## 5. Complications of mandibular fracture reduction:

- a) Bad splint
- b) Delayed union, malunion and fibro osseous union
- c) Non-union
- d) Plate exposure
- e) Space infection: Submandibular space, Sublingual space, Retropharyngeal space