



# TEERTHANKERMAHAVEER UNIVERSITY

(Established under Govt. of U.P. Act No.30,2008)

Delhi Road, Moradabad (U.P.)

## PhD PROGRAMME

### SYLLABUS FOR DISCIPLINE-SPECIFIC COURSE ORAL & MAXILLOFACIAL SURGERY

Course Code: PDS240118	ORAL & MAXILLOFACIAL SURGERY	L	T	P	C
		0	0	0	4
<b>Objective:</b>	The Training Program in Oral and Maxillofacial Surgery is structured to Achieve the following five objectives: Knowledge Skills Attitude Communicative Skills and Ability Research				
<b>Course Outcomes:</b>					
<b>Co 1:</b>	To obtain proper clinical history and methodical examination of the patient, perform essential diagnostic procedures, order relevant laboratory tests and interpret them, and arrive at a reasonable diagnosis of the surgical condition.				
<b>Co 2:</b>	To perform competent Minor Oral Surgical Procedures and Common Maxillofacial Surgery. To treat both Surgically and Medically the problems of the Oral and Maxillofacial and the related areas.				
<b>Co 3:</b>	To diagnose and interpret Clinical, Radiological, and Histopathological Diagnoses for Comprehensive Treatment Planning of diseases of the Oral and Maxillofacial Region.				
<b>Co 4:</b>	To be capable of providing care for Maxillofacial Surgery patients.				
<b>Co 5:</b>	To develop an attitude to adopt Ethical Principles in all aspects 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.				
<b>Course Content:</b>					
<b>Unit 1:</b>	<p><b>Principles Of Surgery:</b> Developing A Surgical Diagnosis, Basic Necessities for Surgery, Aseptic Technique, Incisions, Flap Design Tissue Handling, Haemostasias, Dead Space Management, Decontamination and Debridement, Suturing, Edema Control, Patient General Health and Nutrition.</p> <p><b>Medical Emergencies:</b> Prevention And Management of Altered Consciousness (Syncope, Orthostatic Hypotension, Seizures, Diabetes Mellitus, Adrenal Insufficiency), Hypersensitivity Reactions, Chest Discomfort, And Respiratory Difficulty.</p> <p><b>Examination And Diagnosis:</b> Clinical History, Physical and Radiographic, Clinical and Laboratory Diagnosis, Oral Manifestations of Systemic Diseases, Implications of Systemic</p>				

Diseases In Surgical Patients.

**Haemorrhage And Shock:** Applied Physiology, Clinical Abnormalities of Coagulation, Extra Vascular Hemorrhage, And Hemorrhagic Lesions, Management of Secondary Hemorrhage, Shock.

**Exodontia:**

Principles Of Extraction, Indications and Contraindications, Types of Extraction, Complications and Their Management, Principles Of Elevators And Elevators Used In Oral Surgery.

**Impaction:**

Surgical Anatomy, Classification, Indications and Contraindications, Diagnosis, Procedures, Complications and Their Management.

Surgical Aids to Eruption of Teeth: Surgical Exposure Of Unerupted Teeth, Surgical Repositioning Of Partially Erupted Teeth.

Transplantation Of Teeth

**Surgical Endodontics:**

Indications And Contraindications, Diagnosis, Procedures Of Periradicular Surgery

**Preprosthetic Surgery:**

Requirements, Types (Alveoplasty, Tuberosity Reduction, Mylohyoid Ridge Reduction, Genial Reduction, Removal Of Exostosis, Vestibuloplasty)

**Procedures To Improve Alveolar Soft Tissues:**

Hypermobile Tissues- Operative / Sclerosing Method, Epulis Fissuratum, Frenectomy And Frenotomy ,

**Infection of Head and Neck:**

Odontogenic and Non Odontogenic Infections, Factors Affecting Spread Of Infection, Diagnosis And Differential Diagnosis, Management Of Facial Space Infections, Ludwig Angina, Cavernous Sinus Thrombosis.

**Chronic Infections of The Jaws:**

Osteomyelitis (Types, Etiology, Pathogenesis, Management)  
Osteoradionecrosis

**Maxillary Sinus:**

Maxillary Sinusitis - Types, Pathology, Treatment, Closure of Oro – Antral Fistula, Caldwell- Luc Operation

**Cysts Of the Orofacial Region:**

Classification, Diagnosis, Management of Okc, Dentigerous, Radicular, Non Odontogenic, Ranula

**Neurological Disorders of The Maxillofacial Region:**

Diagnosis and Management of Trigeminal Neuralgia, Mpds, Bell's Palsy, Frey's Syndrome, Nerve Injuries.

**Implantology:**

Definition, Classification, Indications and Contraindications, Advantages and Disadvantages, Surgical Procedure.

Anesthesia

**Local Anesthesia:**

Classification Of Local Anesthetic Drugs, Mode of Action, Indications and Contra Indications, Advantages and Disadvantages, Techniques, Complications And Their Management.

<b>Unit 2:</b>	<b>Salivary Gland:</b> Sialography Salivary Fistula and Management Diseases Of Salivary Gland - Developmental Disturbances, Cysts, Inflammation and Sialolithiasis Mucocele And Ranula Tumors Of Salivary Gland and Their Management Staging Of Salivary Gland Tumors Parotidectomy
<b>Unit 3:</b>	<b>Temporomandibular Joint:</b> Etiology, History Signs, Symptoms, Examination and Diagnosis of Temporomandibular Joint Disorders Ankylosis And Management of The Same with Different Treatment Modalities MPDS And Management Condylectomy - Different Procedures Various Approaches to Tmj Recurrent Dislocations - Etiology and Management
<b>Unit 4:</b>	<b>Oncology:</b> Biopsy Management Of Pre-Malignant Tumors of Head and Neck Region Benign And Malignant Tumors of Head and Neck Region Staging Of Oral Cancer and Tumor Markers Management Of Oral Cancer Radical Neck Dissection Modes Of Spread of Tumors Diagnosis And Management of Tumors Of Nasal, Paranasal, Neck, Tongue, Cheek, Maxilla And Mandible Radiation Therapy In Maxillofacial Regions Lateral Neck Swellings
<b>Unit 5:</b>	<b>Orthognathic Surgery:</b> Diagnosis And Treatment Planning Cephalometric Analysis Model Surgery Maxillary And Mandibular Repositioning Procedures Segmental Osteotomies Management Of Apertognathia
<b>Unit 6:</b>	<b>Aesthetic Facial Surgery:</b> Detailed Knowledge of The Structures of The Face and Neck Including Skin and Underlying Soft Tissue Diagnosis And Treatment Planning of Deformities and Conditions Affecting Facial Skin Underlying Facial Muscles, Bone, Eyelids, External Ear Surgical Management of Post Acne Scarring, Facelift, Blepharoplasty, Otoplasty, Facial Bone Recontouring, Etc Craniofacial Surgery Basic Knowledge of Developmental Anomalies of The Face, Head and Neck Basic Concepts in The Diagnosis and Planning of Various Head and Neck Anomalies Including Facial Clefts, Craniosynostosis, Syndromes, Etc. Current Concept in The Management of Craniofacial Anomalies
<b>Unit 7:</b>	<b>Trauma:</b> Surgical Anatomy of Head and Neck Etiology Of Injury Basic Principles of Treatment  <b>Primary Care:</b> Resuscitation, Establishment of Airway, Management of Hemorrhage, Management of Head Injuries and Admission to Hospital. Diagnosis: Clinical, Radiological

	<p>Soft Tissue Injury of Face and Scalp: Classification and Management of Soft Tissue Wounds, Injuries to Structure Requiring Special Treatment. Dento Alveolar Fractures: Examination and Diagnosis, Classification, Treatment, Prevention.</p> <p><b>Mandibular Fractures:</b> Classification, Examination and Diagnosis, General Principles of Treatment, Complications and Their Management</p> <p><b>Fracture Of Zygomatic Complex:</b> Classification, Examination and Diagnosis, General Principles of Treatment, Complications and Their Management.</p> <p><b>Orbital Fractures:</b> Blowout Fractures Nasal Fractures</p> <p><b>Fractures Of Middle Third of The Facial Skeleton:</b> Emergency Care, Fracture of Maxilla, And Treatment of Le Fort I, II, III, Fractures of Naso Orbito Ethmoidal Region.</p> <p><b>Ophthalmic Injuries:</b> Minor Injuries, Non-Perforating Injuries, Perforating Injuries, Retro Bulbar Hemorrhage, And Traumatic Optic Neuropathy.</p> <p><b>Traumatic Injuries to Frontal Sinus:</b> Diagnosis, Classification, Treatment Maxillofacial Injuries in Geriatric and Pediatric Patients. Gun Shot Wounds and War Injuries Osseointegration In Maxillofacial Reconstruction Metabolic Response to Trauma: Neuro-Endocrine Responses, Inflammatory Mediators, Clinical Implications</p> <p><b>Healing Of Traumatic Injuries:</b> Soft Tissues, Bone, Cartilage, Response of Peripheral Nerve To Injury Nutritional Consideration Following Trauma.</p> <p><b>Tracheostomy:</b> Indications And Contraindications, Procedure, Complications and Their Management.</p>
<p><b>Textbooks:</b></p>	<ol style="list-style-type: none"> <li>1. Impacted teeth; Alling John F &amp; et al.</li> <li>2. Principles of oral and maxillofacial surgery; Vol.1,2 &amp; 3 Peterson LJ &amp; et al.</li> <li>3. Handbook of medical emergencies in the dental office, Malamed SF.</li> <li>4. Killeys Fractures of the mandible; Banks P.</li> <li>5. Killeys fractures of the middle 3rd of the facial skeleton; Banks P.</li> <li>6. Killeys and Kays outline of oral surgery – Part-1; Seward GR &amp; et al</li> <li>7. Essentials of safe dentistry for medically compromised patients; Mc Carthy FM</li> <li>8. Extraction of teeth; Howe, GL</li> <li>9. Minor Oral Surgery; Howe. GL</li> <li>9. Textbook of Oral and Maxillofacial Surgery for clinicians – AOMSI</li> <li>10. Textbook of oral and maxillofacial surgery – Rajiv M Borle</li> <li>11. Textbook of oral surgery-KRUGER</li> <li>12. Textbook of oral surgery-MARX</li> <li>13. Textbook of oral and maxillofacial pathology-TOPAZIAN</li> </ol>

**Reference Books:**

1. Rowe and Williams – Maxillofacial Injuries – volume 1 and volume 2
2. Rowe and Williams Maxillofacial injuries.
3. Oral and Maxillofacial surgery –Fonseca.
4. Peter Ward Booth maxillofacial surgery
5. Peter D. Quinn atlas of Temporomandibular joint surgery.
6. Jatin P. Shah head and neck surgery and oncology
7. Cysts of oral and maxillofacial surgery –SHEARS