



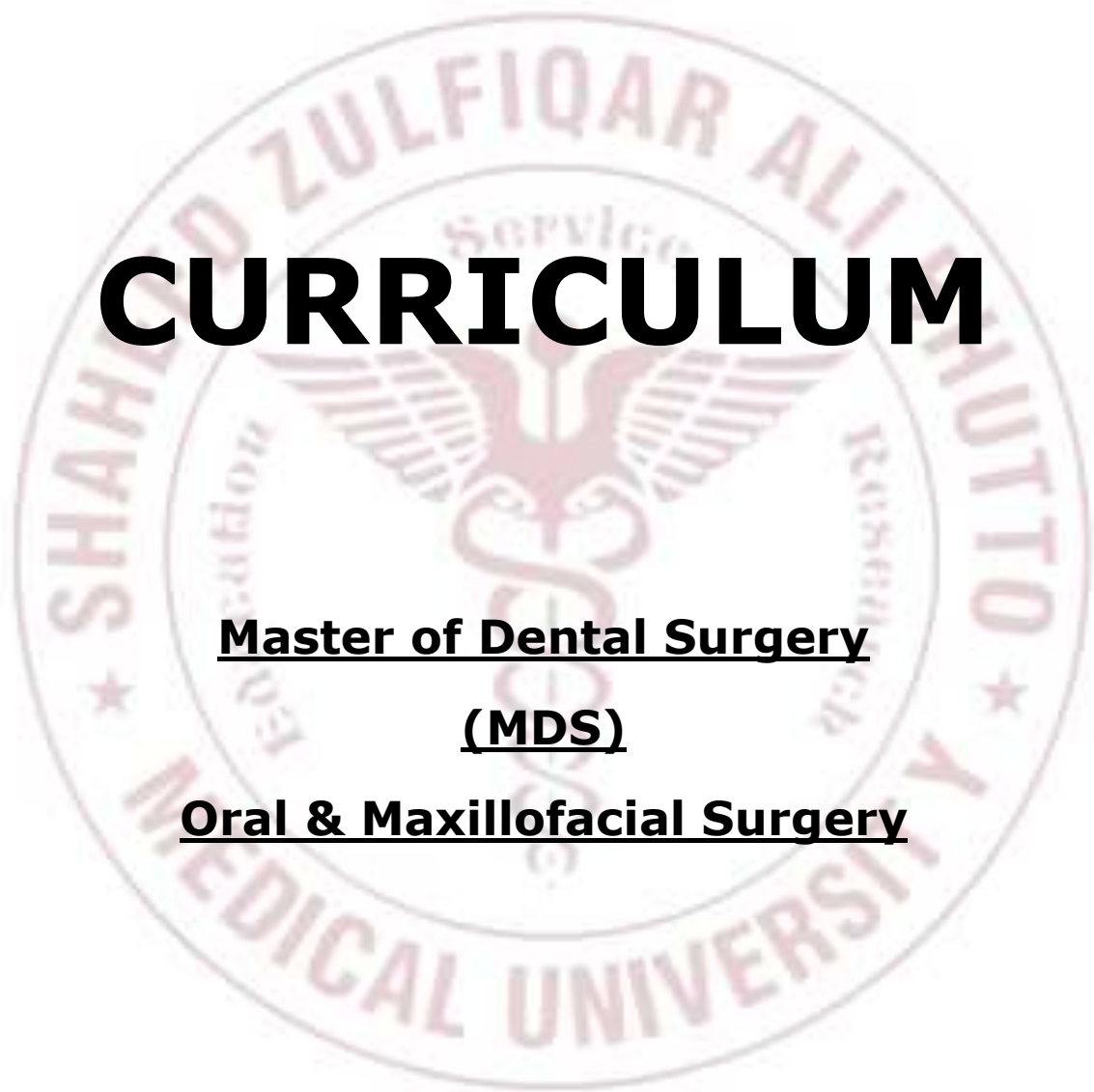
# **ORAL AND MAXILLOFACIAL SURGERY**

**Residency Training Program  
Leading to the degree of**

**Master of Dental Surgery (MDS)**

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**SHAHEED ZULFIQAR ALI BHUTTO MEDICAL UNIVERSITY  
ISLAMABAD**



# **CURRICULUM**

**Master of Dental Surgery**

**(MDS)**

**Oral & Maxillofacial Surgery**

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## **ROAD MAP OF MDS ORAL & Maxillofacial Surgery** **(A Brief Summary)**

### **GENERAL INFORMATION AND PROGRAM GOALS:**

University offer a 04 year MDS program in the field of Oral and Maxillofacial Surgery. This program intends to attract candidates that have an interest in Oral and dental diseases, pathologies, defects and related research methodologies. The curriculum focuses on formal teaching & training as well as practical fieldwork.

This MDS program aims to train and equip the post-graduate students with all the necessary knowledge & skills, at par with international standards, required to be a leader in the field of oral and maxillofacial surgery. The candidates, upon graduation, will be expected to demonstrate a high level of expertise in the field of oral and maxillofacial surgery with a more specific focus on community oriented diseases.

### **COURSE DESCRIPTION:**

A total of one hundred and twenty eight (128) credit hours of instruction and supervised activities are distributed over four years academic period. This comprises approximately 1728 contact hours of instruction and approximately 6672 scheduled hours including formal didactic, clinical, research and laboratory experience.

<b>FIRST YEAR MDS</b>		
<b>ID</b>	<b>Title</b>	<b>Credit Hours</b>
<b>OMFS-01</b>	Basic principles of Surgery	<b>12</b>
<b>OMFS-02</b>	Principles of oral & maxillofacial surgery	<b>5</b>
<b>OMFS-03</b>	Minor oral surgery	<b>5</b>
<b>OMFS-04</b>	Maxillofacial infections	<b>2</b>
<b>OMFS-05</b>	Dental & Maxillofacial Implantology	<b>2</b>
<b>OMFS-06</b>	Maxillofacial trauma	<b>2</b>
<b>OMFS-07</b>	Maxillofacial pathology & Reconstruction	<b>2</b>

<b>OMFS-08</b>	Oro-facial pain & Temporomandibular joint disorders	<b>2</b>
Total		<b>32</b>
<b>SECOND YEAR MDS</b>		
<b>ID</b>	<b>Title</b>	<b>Credit Hours</b>
<b>OMFS-01</b>	Basic principles of Surgery	<b>5</b>
<b>OMFS-02</b>	Principles of oral & maxillofacial surgery	<b>3</b>
<b>OMFS-03</b>	Minor oral surgery	<b>10</b>
<b>OMFS-04</b>	Maxillofacial infections	<b>2</b>
<b>OMFS-05</b>	Dental & Maxillofacial Implantology	<b>4</b>
<b>OMFS-06</b>	Maxillofacial trauma	<b>4</b>
<b>OMFS-07</b>	Maxillofacial pathology & Reconstruction	<b>2</b>
<b>OMFS-08</b>	Oro-facial pain & Temporomandibular joint disorders	<b>2</b>
Total		<b>32</b>
<b>Mid Term Assessment (MTA) Examination</b>		
By University		
<b>THIRD YEAR MDS (Graduate assistantship)</b>		
<b>ID</b>	<b>Title</b>	<b>Credit Hours</b>
<b>OMFS-1</b>	Principles of oral & maxillofacial surgery	<b>1</b>
<b>OMFS-2</b>	Minor oral surgery	<b>3</b>
<b>OMFS-3</b>	Maxillofacial infections	<b>1</b>
<b>OMFS-4</b>	Dental & Maxillofacial Implantology	<b>2</b>
<b>OMFS-5</b>	Maxillofacial trauma	<b>10</b>
<b>OMFS-6</b>	Maxillofacial pathology & Reconstruction	<b>5</b>
<b>OMFS-7</b>	Oro-facial pain & Temporomandibular joint disorders	<b>3</b>
<b>OMFS-8</b>	Facial deformity & Orthogenetic surgery	<b>3</b>
<b>OMFS-9</b>	Facial esthetic surgery	<b>2</b>
<b>OMFS-10</b>	Specialty Journals	<b>2</b>
Total		<b>32</b>
<b>FOURTHS/FINAL YEAR MDS (Graduate assistantship)</b>		
<b>ID</b>	<b>Title</b>	<b>Credit Hours</b>
<b>OMFS-1</b>	Principles of oral & maxillofacial surgery	<b>1</b>

<b>OMFS-2</b>	Minor oral surgery	<b>2</b>
<b>OMFS-3</b>	Maxillofacial infections	<b>1</b>
<b>OMFS-4</b>	Dental & Maxillofacial Implantology	<b>1</b>
<b>OMFS-5</b>	Maxillofacial trauma	<b>8</b>
<b>OMFS-6</b>	Maxillofacial pathology & Reconstruction	<b>5</b>
<b>OMFS-7</b>	Oro-facial pain & Temporomandibular joint disorders	<b>3</b>
<b>OMFS-8</b>	Facial deformity & Orthogenetic surgery	<b>5</b>
<b>OMFS-9</b>	Facial esthetic surgery	<b>3</b>
<b>OMFS-10</b>	Specialty Journals	<b>3</b>
Total		<b>32</b>
Grand Total (First + Second + Third + Final Year)		<b>128</b>
<b>Exit/Final Examination</b>		
By University		

## **Requirements of MDS Degree for Graduate students Enrolled in the Program**

- Fulfillment of University requirements for postgraduate study.
- Four (4) years of consecutive full time advanced study and clinical training.
- Complete and approved master's thesis based on original research during the course of study in an area related to specialty, suitable for publication in a reputable dental journal.
- Must complete all didactic & clinical work in the required curriculum and satisfactorily pass all the University examinations.
- A minimum of 60% must be earned in all work/examinations attempted in the master's program. A grade below this will require re-examination.

A complete road map for postgraduate MS/MD/MDS can be seen on University website at <http://www.szabmu.edu.pk/content/downloads/road-map-for-postgraduate-residents.pdf>



# INTRODUCTION



## **INTRODUCTION**

The residency program in Oral & Maxillofacial Surgery is a four-year course covering all aspects of Oral & Maxillofacial Surgery and leading to the degree of Masters of Dental Surgery (MDS) in Oral & Maxillofacial Surgery.

This curriculum has been developed on the basis of SPICES model which is indicative of the competencies required at the varying levels of training within the specialty together with the knowledge, skills and attitudes achieved by the trainee in acquiring those competencies. The training has been based on the current thinking and the requirements for

- Greater protection of the public interest by providing clear information as to the level of training achieved.
- Improved access to specialty training than general practitioners.
- Greater flexibility of training through the availability of multiple instructors.
- Producing a competent workforce with the appropriate skills and knowledge necessary to meet the varying levels of treatment complexity, as well as considering the relative need and demand of potential patients.
- Acquire the experience to carry out research projects, critically evaluate scientific publications and communicate clinical and research papers in journals and conferences.



## **RATIONALE:**

### **Need of program**

This training program is structured keeping in view the need of the society. Following needs are identified through formal and informal discussion with the stakeholders.

- Deficiency of the quality health care providers to public especially in remote areas in the field of oral and maxillofacial surgery.
- Dearth deficiency of competent faculty in the field.
- Deficiency of state of the art oral and maxillofacial surgery training center.

### **Purpose of training**

The purpose of this curriculum is to guide the training of an individual to the core level of competence required for specialist and consultant. This training will produce consultant who are specialists in their field.

### **Context of Training**

To provide an organized educational program with guidance and supervision, a structured training program will be followed so that each trainee is exposed to different aspects of the subject and acquires special knowledge and skill as expected in this program. The training will provide a basis for the candidate to develop into a lifelong learner who is capable of self-reflection and self-directed learning. It will provide a basis for further ongoing development in the field.

## **Duration of training**

The program leading to MDS in Oral and Maxillofacial Surgery will be of 04 years full time.





## **AIMS & OBJECTIVES**

# **AIMS & OBJECTIVES**

## **Aims of Training**

The candidate should acquire and become proficient in the skills required for oral & maxillofacial surgery practice with an emphasis on multidisciplinary treatment planning, disease prevention, diagnosis and provision of advanced oral & maxillofacial surgery treatment techniques for those clinical cases meriting specialist care. The candidate should demonstrate attitudes necessary for the achievement of high standards of oral & maxillofacial surgery practice both in relation to the oral health needs of the population and to his/her own personal development.

## **Learning Objectives**

On completion of training, the trainee will be able to achieve following aptitudes.

### **Knowledge**

- Demonstrate knowledge of clinical aspects of basic sciences as applied to oral & maxillofacial surgery.
- Demonstrate knowledge of the etiology, pathobiology and clinical presentations of diseases of oral and perioral tissues.
- Demonstrate knowledge of the impact of systemic diseases on oral tissues and of oral diseases on systemic health.
- Acquire knowledge and comprehend the principles of theory and practice of all the domains of oral & maxillofacial surgery.

## **Skill**

- Take history and conduct clinical examination and investigations that allow collection of information needed to evaluate the oral and related medical conditions for all patients.
- Determine the differential, provisional and definitive diagnosis by interpreting and correlating findings from the history, clinical & radiographic examination together with other diagnostic tests.
- Devise treatment plans specific to the needs and expectations of individual patients.
- Execute conventional and contemporary techniques of all the domains of oral & maxillofacial surgery.
- Demonstrate competency in teaching methods, use of information technology, appraisal and assessment techniques and development of appropriate learning methods for lifelong learning.
- Show evidence of ability to undertake research.

## **Attitude**

- Demonstrate a professional and ethical approach to patient care.
- Demonstrate a professional attitude to all the members of the team.
- Demonstrate full and clear understanding of equality and diversity legislation as it applies to the workplace and to professional practice.



# **ENTRY CRITERIA**



## **ENTRY CRITERIA:**

### **Eligibility to apply for MDS Oral and Maxillofacial Surgery**

- Candidate must possess BDS or equivalent degree and one year house job from PMDC recognized Institutions.
- Permanent valid registration with PM&DC.
- Declared successful in MDS Part-I for University programs.
- In case of foreign candidate, valid registration with Medical Council of their country of origin must be produced.

### **Required Documents**

Attested photo copies of the following documents must be attached with application form:

- Computerized National Identity Card (CNIC)
- Domicile certificate
- Matric/O Level, FSc/A Level, Certificates or equivalent
- BDS degree with detail marks certificates of all professional
- BDS Attempts certificates of all professional
- NEB pass certificate (for foreign graduates)
- House Job certificates
- PMDC valid permanent registration certificate
- MDS Part-I passing certificate
- Experience Certificates (if any)
- Migration Certificate (To be produced at the time of admission)

### **Admission Procedure**

- Details of admission procedure is available on university website at <http://www.szabmu.edu.pk/admission/postgraduate-admission>



## **CONTENT OF LEARNING:**

## CONTENT OF LEARNING:

The program outline addresses both the knowledge needed in Oral and Maxillofacial Surgery and allied medical specialties in its scope. A minimum of four years of formal training through a graded system of education as specified will equip the trainee with knowledge, skill and attitude at its completion to be able to practice basic oral and maxillofacial surgery competently.

The topics are considered as under:-

ID	Titles	Detail of Titles
OMFS-1	<b>Principles of Oral &amp; Maxillofacial Surgery</b>	Diagnosis, history taking, clinical examination, investigations
		Evolution of Maxillofacial surgery
		Informed consent / medico-legal issues
		Concept of essential drugs and rational use of drugs
		Principles of surgery – developing a surgical diagnosis, basic necessities for surgery, aseptic technique, incisions, tissue handling, homeostasis, dead space management, decontamination and debridement, suturing, edema control, patient general health and nutrition.
		General and hospitalized patient management
		Maxillofacial radiology / radio diagnosis
		Pre-Surgical workup
		Post-Surgical care
		Wound management
OMFS-2	<b>Minor Oral Surgery</b>	Medical emergencies
		Local Anaesthesia
		Exodontia- Simple and complicated+
		Impacted teeth
		Pre-prosthetic and Reconstructive Surgery
		Clinical oral surgery – all aspects of dento alveolar surgery
OMFS-3	<b>Maxillofacial Infections</b>	Principles of Management of Odontogenic and non-odontogenic Infections
		Airway obstruction / management
		Sinus Infections
		Osteomyelitis and Osteoradionecrosis
OMFS-4	<b>Dental &amp; Maxillofacial Implantology</b>	Dental Implant Planning, Surgery, Prosthodontics
		Osseointegration
		Soft Tissue Management in Implant Therapy
		Bone Grafting Strategies for Vertical Alveolar Augmentation
		The Zygoma Implant

ID	Titles	Detail of Titles
		Complications and Maintenance
OMFS-5	Maxillofacial Trauma	Initial Management of the Trauma Patient
		Soft Tissue Injuries
		Rigid versus Nonrigid Fixation
		Management of Alveolar and Dental Fractures
		Principles of Management of Mandibular Fractures
		Management of Maxillary Fractures
		Management of Zygomatic Complex Fractures
		Orbital and Ocular Trauma
		Management of Frontal Sinus and Naso-orbitoethmoid
		Gunshot Injuries
		Pediatric Craniomaxillofacial Fracture Management
OMFS-6	Maxillofacial Pathology & Reconstruction	Soft and hard tissue cysts of head and neck region and their management
		Benign and Malignant tumours of head and neck region and their management
		Tissue grafting including local and regional flaps
		Craniofacial surgery and soft and hard tissue reconstruction
		Head and neck oncology (Diagnosis & Management)
		Micro vascular and Micro-neurosurgery surgery
		Salivary Gland Diseases and Tumours, Diagnosis, Management and complications
OMFS-7	Oro-facial Pain & Temporomandibular Joint Disorders	Anaesthesia (Local & General, Sedation)
		Facial pain, Facial palsy and nerve injuries
		Pain control
		Temporomandibular joint disorders
		Temporomandibular joint surgeries
OMFS-8	Facial Deformity & Orthogenetic Surgery	Orthognathic surgery & Surgical orthodontics
		Craniofacial anomalies
		Distraction osteogenesis in maxillofacial region
		Cryosurgeries
		Cleft lip and palate surgery
		Surgical and Nonsurgical Management of Obstructive Sleep Apnea
OMFS-9	Facial Esthetic Surgery	Blepharoplasty
		Basic Principles of Rhinoplasty & Rhytidectomy
		Forehead and Brow Procedures
		Skin Rejuvenation Procedures
		Alloplastic Aesthetic Facial Augmentation
		Otoplastic Surgery for the Protruding Ear
OMFS-10	Journals	British Journal of Oral & Maxillofacial Surgery
		American Journal of Oral & Maxillofacial Surgery
		Pakistan Oral and Dental Journal (Maxillofacial Surgery Section)



**Oral and Maxillofacial surgery  
Specialty Courses**

## PRINCIPLES OF ORAL & MAXILLOFACIAL SURGERY

### Patient assessment, examination, diagnosis & treatment planning

Objectives	Learning Outcomes	Teaching & Learning Methods	Assessments
<p>To provide information about and experience in:</p> <ul style="list-style-type: none"> <li>• History taking</li> <li>• Examination of orofacial soft tissues</li> <li>• Examination of Teeth &amp; hard tissues</li> <li>• Review of periodontium</li> <li>• Examination of occlusion</li> <li>• Various diagnostic tests &amp; investigations</li> <li>• Treatment plan sequencing</li> <li>• Interdisciplinary considerations in treatment planning</li> </ul>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"> <li>• Examine the patient thoroughly</li> <li>• Make a differential diagnosis</li> <li>• Perform relevant diagnostic tests &amp; carry out investigations to establish definitive diagnosis</li> <li>• Devise strategies and plans based on the likely prognosis and outcomes of the various treatment options, relating this to prognosis without treatment and establishing a resultant priority and sequence of treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace (clinical) experience</li> <li>• Attend trainee seminars within department</li> <li>• Attendance at suitable courses</li> <li>• Attendance at suitable meetings</li> <li>• Independent study</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace based assessments (CBD, DOPS)</li> <li>• Written Examination/ VIVA</li> </ul>

## **PRINCIPLES OF ORAL & MAXILLOFACIAL SURGERY**

### **Esthetic considerations in diagnosis & treatment planning**

<b>Objectives</b>	<b>Learning Outcomes</b>	<b>Teaching &amp; Learning Methods</b>	<b>Assessments</b>
<p>To provide in depth knowledge and skill in:</p> <ul style="list-style-type: none"><li>• Principles of microesthetics and macroesthetics</li></ul>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"><li>• Examine the patient thoroughly keeping in view esthetic considerations</li><li>• Design a treatment plan which not only fulfils patients need but is also esthetically acceptable.</li><li>• Design a treatment plan keeping in view latest innovations in the field of esthetic dentistry.</li></ul>	<ul style="list-style-type: none"><li>• Workplace (clinical) experience</li><li>• Clinical cases for observational and personal treatment</li><li>• Attend trainee seminars within department</li><li>• Attendance at suitable courses</li><li>• Attendance at suitable meetings</li><li>• Self-directed &amp; Independent study</li></ul>	<ul style="list-style-type: none"><li>• Workplace based assessments (CBD, DOPS)</li><li>• Written Examination/ VIVA</li></ul>

## PRINCIPLES OF ORAL & MAXILLOFACIAL SURGERY

### Management of adults and children as in-patients, including the medically at-risk patient

Objectives	Learning Outcomes	Teaching & Learning Methods	Assessments
<p>To provide in depth knowledge and skill in:</p> <ul style="list-style-type: none"> <li>• Ability to explain to a patient the hospital process.</li> <li>• Describe differential diagnosis when appropriate, and treatment options.</li> <li>• Know when to refer to or confer with other specialists.</li> <li>• Ability to undertake therapy in a safe manner.</li> <li>• Ability to recognize and deal with complications that may arise.</li> <li>• Describe the spectrum of general illness behavior and relate this to diseases relevant to oral &amp; maxillofacial surgery practice and inpatient</li> </ul>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"> <li>• Take record and interpret an accurate history from patients of any age and communicate effectively.</li> <li>• Know where to refer. Seek advice if unsure. Recognize when input from another specialty is required for individual patients.</li> <li>• Work effectively with other health care professionals.</li> <li>• Describe the nature, benefits and risks of planned procedure.</li> <li>• Assess the likelihood of a significant underlying diagnosis and differentiate patients with urgent and non-</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace (clinical) experience</li> <li>• Clinical cases for observational and personal treatment</li> <li>• Attend trainee seminars within department and wards</li> <li>• Attendance at suitable courses</li> <li>• Attendance at suitable combined clinic-pathological meetings</li> <li>• Self-directed &amp; Independent study</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace based assessments (CBD, DOPS, MSF)</li> <li>• Written Examination/ VIVA</li> </ul>



<p>management.</p> <ul style="list-style-type: none"> <li>• Know and interpret the appropriate investigations needed for management of patients with complex medical histories and/or how to obtain relevant advice.</li> <li>• know the process for patient discharge, appropriate prescribing and arrangements for follow-up if required.</li> </ul>	<p>urgent care needs.</p> <ul style="list-style-type: none"> <li>• Respect patient confidentiality. Maintain cultural awareness and identity. Value patient comprehension and views.</li> <li>• Demonstrate willingness and ability to teach students and healthcare colleagues sound history skills where appropriate.</li> <li>• Show respect for others' opinions. Be conscientious and work cooperatively. Respect colleagues, including nonmedical professionals and recognize good advice.</li> <li>• An appreciation of when to discuss patient management with colleagues from other hospital clinical specialties.</li> </ul>		
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## MINOR ORAL SURGERY:

### **Extraction of teeth & retained roots/pathology and management of associated complications including oro-antral fistula**

<b>Objectives</b>	<b>Learning Outcomes</b>	<b>Teaching &amp; Learning Methods</b>	<b>Assessments</b>
<p>To provide in depth knowledge and skill in:</p> <ul style="list-style-type: none"> <li>• Dental extractions</li> <li>• Ability to assess those teeth that require extraction and those that can be restored.</li> <li>• Ability to safely extract a tooth and deal with complications that may arise</li> </ul> <p>Oro-antral communication /root/tooth in maxillary antrum</p> <ul style="list-style-type: none"> <li>• Ability to assess and safely repair an OAF (or remove tooth/root from antrum) and deal with complications that may arise.</li> </ul>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"> <li>• Demonstrate an understanding of various aspects of dental extractions</li> <li>• Apply knowledge to diagnose &amp; prevent OAF</li> <li>• Devise a management plan tailored to patient's needs</li> <li>• Assess the risk of dental extractions with the help of various tests</li> <li>• use instruments safely and appropriately.</li> <li>• Carry out technique under local anaesthesia, sedation or general anaesthesia.</li> <li>• Carry out steps of procedure</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace (clinical) experience</li> <li>• Clinical cases for observational and personal treatment</li> <li>• Extra mural training</li> <li>• Attend trainee seminars within department</li> <li>• Attendance at suitable courses</li> <li>• Attendance at suitable meetings</li> <li>• Independent study</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace based assessments (CBD, DOPS, Mini-CEX, MSF)</li> <li>• Written Examination/ VIVA</li> <li>• OSCE</li> </ul>

	<p>safely and correctly.</p> <ul style="list-style-type: none"><li>• Surgically remove a fractured tooth</li><li>• Resist pressure from patient or carer to provide inappropriate treatment e.g. extraction of tooth that does not warrant such.</li><li>• Be willing to offer care. Behave appropriately when dealing with a difficult patient.</li></ul>		
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**MINOR ORAL SURGERY:**

**Management of impacted and un-erupted teeth; management of complications, Dent alveolar surgery in relation to orthodontic treatment**

Objectives	Learning Outcomes	Teaching & Learning Methods	Assessments
<p>To provide in depth knowledge and skill in:</p> <ul style="list-style-type: none"> <li>• Ability to identify an impacted tooth need removal and can manage it in a safe manner.</li> <li>• Ability to recognize and deal with complications that may arise.</li> <li>• Ability to identify whether an unerupted tooth requires removal, exposure, reimplantation/transplantation, or retention in conjunction with relevant specialists.</li> <li>• Relevant pharmacology and therapeutics of postoperative analgesia prescribed.</li> <li>• Explain why and when to leave a retained root.</li> </ul>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"> <li>• Formulate treatment plan including aftercare.</li> <li>• Be able to treat/drain infection and/or remove tooth under local anesthesia, sedation or general anesthesia.</li> <li>• Carry out steps of procedure safely and correctly,</li> <li>• Undertake surgical exposure or transplantation of unerupted tooth, including various techniques of exposure and bone removal, packing and/or bonding of tooth, techniques of tooth splintage and intra-oral suturing techniques</li> <li>• Institute aftercare and review</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace (clinical) experience</li> <li>• Clinical cases for observational and personal treatment</li> <li>• Extra mural training</li> <li>• Attend trainee seminars within department</li> <li>• Attendance at suitable courses</li> <li>• Attendance at suitable meetings</li> <li>• Role Modelling</li> <li>• Independent study</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace based assessments (CBD, DOPS, Mini-CEX, MSF)</li> <li>• Written Examination/ VIVA</li> <li>• OSCE</li> </ul>

## **MINOR ORAL SURGERY:**

### **Peri-radicular surgery**

<b>Objectives</b>	<b>Learning Outcomes</b>	<b>Teaching &amp; Learning Methods</b>	<b>Assessments</b>
<p>To provide in depth knowledge and skill in:</p> <ul style="list-style-type: none"><li>• Ability to identify whether periradicular surgery is appropriate or other forms of management required.</li><li>• Know differential diagnosis and treatment options.</li></ul>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"><li>• Formulate treatment plan including aftercare.</li><li>• Apical surgery and enucleation of cyst where present:</li><li>• Carry out surgical technique under local anesthesia, sedation or general anesthesia.</li><li>• Carry out steps of procedure safely and correctly.</li><li>• Demonstrate techniques of enucleation of pathology.</li><li>• Demonstrate intra-oral suturing techniques.</li></ul>	<ul style="list-style-type: none"><li>• Workplace (clinical) experience</li><li>• Clinical cases for observational and personal treatment</li><li>• Extra mural training</li><li>• Attend trainee seminars within department</li><li>• Attendance at suitable courses</li><li>• Attendance at suitable meetings</li><li>• Role Modelling</li><li>• Independent study</li></ul>	<ul style="list-style-type: none"><li>• Workplace based assessments (CBD, DOPS, Mini-CEX, MSF)</li><li>• Written Examination/ VIVA</li><li>• Portfolio</li><li>• OSCE</li></ul>

## **MINOR ORAL SURGERY:**

### **Intra or extra oral biopsy techniques**

<b>Objectives</b>	<b>Learning Outcomes</b>	<b>Teaching &amp; Learning Methods</b>	<b>Assessments</b>
<p>To provide in depth knowledge and skill in:</p> <ul style="list-style-type: none"><li>• Assessment of swelling and other problems intra or extra orally and its causes.</li><li>• Know differential diagnosis and treatment options.</li><li>• Know when to refer or confer with other specialists.</li><li>• Ability to undertake therapy in a safe manner.</li><li>• Ability to recognize and deal with complications that may arise.</li></ul>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"><li>• Formulate treatment plan including aftercare.</li><li>• Carry out appropriate surgical technique under local anesthesia, sedation or general anesthesia safely.</li><li>• Institute aftercare and review.</li><li>• Demonstrate ability to discriminate between those who need surgery and those who don't, and communicate this.</li></ul>	<ul style="list-style-type: none"><li>• Workplace (clinical) experience</li><li>• Clinical cases for observational and personal treatment</li><li>• Extra mural training</li><li>• Attend trainee seminars within department</li><li>• Attendance at suitable courses</li><li>• Attendance at suitable meetings</li><li>• Role Modelling</li><li>• Independent study</li></ul>	<ul style="list-style-type: none"><li>• Workplace based assessments (CBD, DOPS, Mini-CEX, MSF)</li><li>• Written Examination/ VIVA</li><li>• Portfolio</li><li>• OSCE</li></ul>

## MAXILLOFACIAL INFECTIONS

### Management of odontogenic and all other oral infections

Objectives	Learning Outcomes	Teaching & Learning Methods	Assessments
<p>Abscess/infection</p> <ul style="list-style-type: none"> <li>• Ability to identify dental/oral surgical cause for infection (local and/or spreading) and manage it in a safe manner.</li> </ul> <p>Ability to recognize and deal with complications that may arise</p>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"> <li>• Describe: Signs and symptoms, differential diagnosis, investigations and radiographic interpretation</li> <li>• Methods of medical and surgical management</li> <li>• Potential complications including management of compromised airway.</li> <li>• Describe and manage the causes of swelling of head and neck</li> <li>• Describe and identify the anatomy of oro-facial spaces.</li> <li>• Drain tissue space infection using appropriate aseptic preparation, Exposure and exploration of tissue space(s).</li> <li>• Recognize and manage the airway risk.</li> <li>• Secure appropriate drains and dressings.</li> <li>• Maintain disposition to do good to patients and always act in patients' best interests.</li> </ul>	<ul style="list-style-type: none"> <li>• Systematic simulation laboratory exercises</li> <li>• Workplace (clinical) experience</li> <li>• Attendance at suitable courses</li> <li>• Attend trainee seminars within department</li> <li>• Attendance at suitable meetings</li> <li>• Independent study</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace based assessments ( DOPS, Mini-CEX, MSF)</li> <li>• OSCE</li> </ul>

## DENTAL & MAXILLOFACIAL IMPLANTOLOGY

### **Insertion of osseointegrated dental implants including bone augmentation and soft tissue management**

<b>Objectives</b>	<b>Learning Outcomes</b>	<b>Teaching &amp; Learning Methods</b>	<b>Assessments</b>
<p>To provide in depth knowledge and skill about :</p> <ul style="list-style-type: none"> <li>• Dental implants as replace missing dentition and oral tissues.</li> <li>• Ability to identify which treatment option is best for the patient.</li> <li>• Know when to refer to or confer with other specialists e.g. restorative specialist.</li> <li>• Current and seminal literature on indications for, success / failure criteria and biological implications of provision of dental implants.</li> </ul>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"> <li>• Ability to undertake surgical procedures to Insert implants in a safe manner.</li> <li>• Harvest bone and augmentation, and/or soft tissue procedures or guided bone regeneration, under local anesthesia, sedation or general anesthesia</li> <li>• Construct surgical and radiographic guides to aid planning of number, position and angulation of fixtures</li> <li>• Ability to recognize and deal with complications that may arise.</li> </ul>	<ul style="list-style-type: none"> <li>• Systematic simulation laboratory exercises</li> <li>• Workplace (clinical) experience</li> <li>• Clinical cases for observational and personal treatment</li> <li>• Attend trainee seminars within department &amp; wards</li> <li>• Attendance at suitable courses</li> <li>• Attendance at suitable meetings</li> <li>• Independent study</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace based assessments (DOPS, Mini-CEX, MSF)</li> <li>• OSCE</li> </ul>



## MAXILLOFACIAL TRAUMA

### Management of dento-alveolar trauma and management and treatment of facial fractures

Objectives	Learning Outcomes	Teaching & Learning Methods	Assessments
<p>To provide in depth knowledge and skill in:</p> <ul style="list-style-type: none"> <li>• Ability to identify extent of dento-alveolar trauma, facial fractures and treatment options.</li> <li>• Know when to refer to or confer with other specialists.</li> <li>• Ability to undertake surgery in a safe manner under any anesthesia.</li> <li>• Ability to recognize and deal with complications that may arise.</li> </ul>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"> <li>• Assess and examine a patient with facial trauma with interpretation of radiographs.</li> <li>• Manage airway and treat emergency facial trauma.</li> <li>• Assessment of head injury and cranial nerve functions</li> <li>• Formulate treatment plan and manage facial trauma effectively</li> <li>• Maintain disposition to do good to patients and always act in patients' best interests.</li> <li>• Institute aftercare and review.</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace (clinical) experience</li> <li>• Clinical cases for observational and personal treatment</li> <li>• Attend trainee seminars within department and wards.</li> <li>• Attendance at suitable courses</li> <li>• Attendance at suitable meetings</li> <li>• Self-directed &amp; Independent study</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace based assessments (CBD, DOPS, Mini-CEX, MSF)</li> <li>• Written Examination/ VIVA</li> <li>• Portfolio</li> <li>• Long &amp; Short case</li> <li>• OSCE</li> </ul>

## MAXILLOFACIAL PATHOLOGY & RECONSTRUCTION

### Treatment of tumor (benign & malignant) and cystic lesions of hard and soft tissues

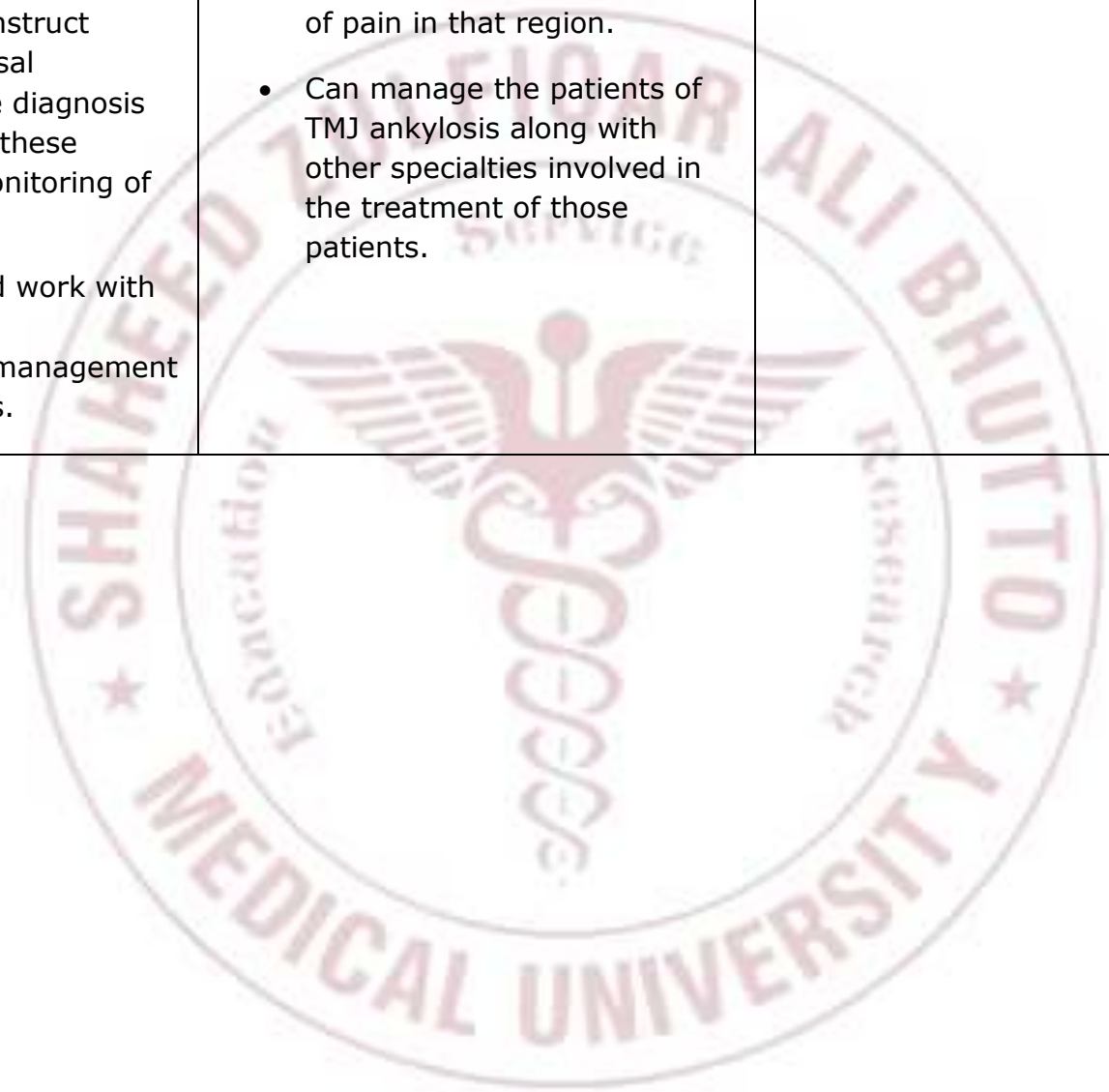
Objectives	Learning Outcomes	Teaching & Learning Methods	Assessments
<p>To provide in depth knowledge and skill in:</p> <ul style="list-style-type: none"> <li>• Ability to identify cysts and tumorous lesions in hard and soft tissue of maxillofacial region.</li> <li>• Know differential diagnosis and treatment options.</li> <li>• Know when to refer to or confer with other specialists.</li> <li>• Ability to undertake therapy in a safe manner.</li> <li>• Ability to recognize and deal with complications that may arise.</li> </ul>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"> <li>• Formulate treatment plan</li> <li>• Institute aftercare and review</li> <li>• Be able to decide correct management (biopsy or excise) of lesion under local anesthetic, general anesthetic or sedation techniques.</li> <li>• Carry out all steps of procedure safely and correctly</li> <li>• Can communicate with other specialties for the better treatment of patients</li> </ul>	<ul style="list-style-type: none"> <li>• Systematic simulation laboratory exercises</li> <li>• Workplace (clinical) experience</li> <li>• Clinical cases for observational and personal treatment</li> <li>• Attend trainee seminars within department &amp; wards</li> <li>• Attendance at suitable courses</li> <li>• Attendance at suitable meetings</li> <li>• Independent study</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace based assessments (DOPS, Mini-CEX, MSF)</li> <li>• OSCE</li> </ul>

## ORO-FACIAL PAIN & TEMPOROMANDIBULAR JOINT DISORDERS

### Management of oro-facial pain including temporomandibular joint disorders

Objectives	Learning Outcomes	Teaching & Learning Methods	Assessments
<p>To provide in depth knowledge and skill in:</p> <ul style="list-style-type: none"> <li>• Ability to identify a differential diagnosis for facial pain based upon history and relevant investigations and knows investigations &amp; treatment options.</li> <li>• Know when to refer to or confer with other specialists.</li> <li>• Ability to undertake therapy in a safe manner and to recognize and deal with complications that may arise.</li> <li>• Diagnose oral parafunction and other factors in the development of dysfunction of mandibular movements and the TMJs.</li> <li>• Provide behavioral advice for</li> </ul>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"> <li>• Take a comprehensive history and examine the TMJ and muscles of mastication.</li> <li>• Formulate and instigate a treatment plan.</li> <li>• Communicate effectively and empathetically with patients to identify potential etiological factors and signs and symptoms of temporomandibular disorders.</li> <li>• Show a high degree of skill (conservative or surgical) in the choice and execution of appropriate techniques for treatment in conjunction with other specialists/dental care professionals managing the patient.</li> </ul>	<ul style="list-style-type: none"> <li>• Systematic simulation laboratory exercises</li> <li>• Workplace (clinical) experience</li> <li>• Clinical cases for observational and personal treatment</li> <li>• Attend trainee seminars within department</li> <li>• Attendance at suitable courses</li> <li>• Attendance at suitable meetings</li> <li>• Independent study</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace based assessments (CBD, DOPS, Mini-CEX, MSF)</li> <li>• OSCE</li> </ul>

<p>the management of these problems and Construct appropriate occlusal appliances for the diagnosis and treatment of these problems with monitoring of effectiveness.</p> <ul style="list-style-type: none"> <li>• Communicate and work with colleagues on the multidisciplinary management of these problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Exclude other serious causes of pain in that region.</li> <li>• Can manage the patients of TMJ ankylosis along with other specialties involved in the treatment of those patients.</li> </ul>		
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## FACIAL DEFORMITY & ORTHOGNATHIC SURGERY

### Diagnosis of dentofacial deformity, orthognathic problems and its management

Objectives	Learning Outcomes	Teaching & Learning Methods	Assessments
<p>To provide in depth knowledge and skill in:</p> <ul style="list-style-type: none"> <li>• Ability to obtain a history.</li> <li>• Know a differential diagnosis for the development of such conditions, and treatment options.</li> <li>• Know when to refer to or confer with other specialists.</li> <li>• Describe developmental anatomy of facial skeleton and facial musculature. With classification, Psychology and assessment of facial deformity.</li> <li>• Norms of facial proportions and techniques of cephalometric analysis.</li> </ul>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"> <li>• Take an appropriate history to determine the etiological factors involved in existing condition.</li> <li>• Can manage the deformity medically as well surgically in relation to function and aesthetics.</li> <li>• Know and manage the potential complications of along with other team members.</li> <li>• Maintain disposition to do good to patients and always act in patients' best interests.</li> <li>• Institute aftercare and review.</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace (clinical) experience</li> <li>• Clinical cases for observational and personal treatment</li> <li>• Attend trainee seminars within department</li> <li>• Attendance at suitable courses</li> <li>• Attendance at suitable meetings</li> <li>• Independent study</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace based assessments (CBD, DOPS)</li> <li>• Written Examination/ VIVA</li> </ul>

## FACIAL ESTHETIC SURGERY

### Understanding and management facial aesthetic surgical procedures

Objectives	Learning Outcomes	Teaching & Learning Methods	Assessments
<p>To provide in depth knowledge and skill in:</p> <ul style="list-style-type: none"> <li>• Ability to obtain a history.</li> <li>• Know a differential diagnosis for the development of such conditions, and treatment options.</li> <li>• Know when to refer to or confer with other specialists.</li> <li>• Describe developmental anatomy of facial skeleton and facial musculature. With classification, Psychology and assessment of facial deformity.</li> <li>• Norms of facial proportions</li> </ul>	<p>The trainee should be able to:</p> <ul style="list-style-type: none"> <li>• Take an appropriate history to determine the etiological factors involved in existing condition.</li> <li>• Can manage and perform the surgical procedures (Blepharoplasty, rhinoplasty, rhytidectomy, forehead and brow procedures, skin rejuvenation procedures, alloplastic aesthetic facial augmentation and otoplastic surgery for the protruding ear) in relation to function and aesthetics.</li> <li>• Know and manage the potential complications and their management along with other team members.</li> <li>• Maintain disposition to do good to patients and always act in patients' best interests.</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace (clinical) experience</li> <li>• Clinical cases for observational and personal treatment</li> <li>• Attend trainee seminars within department</li> <li>• Attendance at suitable courses</li> <li>• Attendance at suitable meetings</li> <li>• Independent study</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace based assessments (CBD, DOPS)</li> <li>• Written Examination/ VIVA</li> </ul>

## Allied specialties

Trainee will be rotating in the following department for the clear understanding of the basic concepts. Mandatory rotations for MDS Oral and Maxillofacial Surgery will be as follow

- Department of Accident and Emergency 2 months
- Department of General Surgery 2 months
- Department of Anesthesia and ICU 2 months
- Department of Neurosurgery 2 months
- Department of Plastic Surgery 1 month
- Department of ENT 1 month

\*Outcomes of mandatory rotations are attached as "Annexure B"



## Research

The resident would be required to undertake a research project and to present the result for examination in the form of a thesis. They would be encouraged to present and publish the result of the project in refereed journals.

The guideline for synopsis and thesis writing is available on University website at

<http://www.szabmu.edu.pk/content/downloads/guidelines-for-synopsis-writing.pdf>

<http://www.szabmu.edu.pk/content/downloads/guidelines-for-thesis-writing.pdf>







# **ASSESSMENT**

# **ASSESSMENT**

Assessment of trainees will cover the cognitive, psychomotor and affective domains. It will take two forms

- Formative Assessment
- Summative Assessment

## **Formative Assessment**

It is the continuous assessment of progress and competence. It will be conducted through workplace based assessment throughout the training. Assessment will be undertaken by a range of assessors and will cover a range of procedures appropriate to the stage of training. Formative assessment will include

- Directly observed practical skills (DOPS)
- Case based discussion (CbD)
- Mini clinical examination exercises (Mini-CEX)
- Multiple source feedback (MSF)

## **Summative Assessment**

Summative assessment will be held twice

- Mid Term Assessment (MTA) Examination (At the end of 2<sup>nd</sup> year)
- Final/Exit Examination (At the end of Final Year)

The level of performance required for passing the exam will depend on the knowledge and skills necessary for acceptable performance and will not be adjusted to regulate the number or proportion of persons passing the examination. The pass point will be determined by careful analysis and judgment of acceptable performance.

## **Record of Clinical Cases**

The trainees will be required to keep a record of the allocated clinical work in a log book. It will be the responsibility of trainee to keep the log book up to date with the signature of the faculty certifying the work.



## TABLE OF SPECIFICATION

Table of specification for Mid Term Assessment (MTA) and Final (Exist) Examination is here as under

### TOS FOR MID TERM ASSESSMENT (MTA) MDS (OMFS)

There will be theory paper as well as Practical examination

- |                              |                  |
|------------------------------|------------------|
| • <b>Theory Paper (MCQs)</b> | <b>100 Marks</b> |
| • <b>Practical (OSCE)</b>    | <b>100 Marks</b> |

### TOS FOR MTA THEORY EXAMINATION

TOS ID	Title	Knowledge			Skill			Attitude			%	MCQs
		C1	C2	C3	P1	P2	P3	A1	A2	A3		
<b>OMFS-1</b>	Basic principles of Surgery			20			30			10	<b>50</b>	<b>50</b>
<b>OMFS-2</b>	Principles of oral & maxillofacial surgery			02			06			02	<b>10</b>	<b>10</b>
<b>OMFS-3</b>	Minor oral surgery			03			10			02	<b>15</b>	<b>12</b>
<b>OMFS-4</b>	Maxillofacial infections			01			03			01	<b>5</b>	<b>5</b>
<b>OMFS-5</b>	Dental & Maxillofacial Implantology			01			03			01	<b>5</b>	<b>5</b>
<b>OMFS-6</b>	Maxillofacial trauma			02			02			01	<b>5</b>	<b>8</b>
<b>OMFS-7</b>	Maxillofacial pathology & Reconstruction			01			03			01	<b>5</b>	<b>5</b>
<b>OMFS-8</b>	Oro-facial pain & Temporomandibular joint disorders			01			03			01	<b>5</b>	<b>5</b>
<b>TOTAL</b>											<b>100</b>	<b>100</b>

**Note:** The details of these modules titles are given below

### Detail of TOS for MTA Theory Examination

TOS ID	Title	TOS Sub ID	Detail of Title	Weightage %		MCQs	
OMFS-1	Basic principles of Surgery	OMFS-1.1	History, Examination and Diagnostic imaging	5	50	5	50
		OMFS-1.2	Wounds. Tissue repair and Scars	3		3	
		OMFS-1.3	Complications of surgery	3		3	
		OMFS-1.4	Nutrition and Fluid therapy (Shock and Blood transfusion)	7		7	
		OMFS-1.5	Blood disorders and their management in surgical practice	3		3	
		OMFS-1.6	Cross-infection & Surgical Sepsis	5		5	
		OMFS-1.7	Pre, Per and Post-operative care of surgical patients	7		7	
		OMFS-1.8	General anaesthesia & Conscious sedation techniques	6		6	
		OMFS-1.9	BLS & ATLS	5		5	
		OMFS-1.10	Burns	3		3	
		OMFS-1.11	Surgical Ethics	3		3	
OMFS-2	Principles of oral & maxillofacial surgery	OMFS-2.1	Diagnosis, history taking, clinical examination, investigations	10	10		
		OMFS-2.2	Evolution of Maxillofacial surgery				
		OMFS-2.3	Informed consent / medico-legal issues				
		OMFS-2.4	Concept of essential drugs and rational use of drugs				
		OMFS-2.5	Principles of surgery – developing a surgical diagnosis, basic necessities for surgery, aseptic technique, incisions, tissue handling, homeostasis, dead space management, decontamination and debridement, suturing, edema control, patient general health				

TOS ID	Title	TOS Sub ID	Detail of Title	Weightage %	MCQs
			and nutrition.		
		OMFS-2.6	General patient management		
		OMFS-2.7	Management of the Hospitalized Patient		
		OMFS-2.8	Maxillofacial radiology / radio diagnosis		
		OMFS-2.9	Pre-Surgical workup		
		OMFS-2.10	Post-Surgical care		
		OMFS-2.11	Wound management		
<b>OMFS-3</b>	<b>Minor oral surgery</b>	OMFS-3.1	Medical emergencies	<b>12</b>	<b>12</b>
		OMFS-3.2	Local Anaesthesia		
		OMFS-3.3	Exodontia- Simple and complicated+		
		OMFS-3.4	Impacted teeth		
		OMFS-3.5	Pre-prosthetic and Reconstructive Surgery		
		OMFS-3.6	Clinical oral surgery – all aspects of dento alveolar surgery		
<b>OMFS-4</b>	<b>Maxillofacial infections</b>	OMFS-4.1	Principles of Management of Odontogenic Infections	<b>5</b>	<b>5</b>
		OMFS-4.2	Airway obstruction / management		
		OMFS-4.3	Sinus Infections		
		OMFS-4.4	Osteomyelitis and Osteoradionecrosis		
<b>OMFS-5</b>	<b>Dental &amp;</b>	OMFS-5.1	Dental Implant Planning, Surgery, Prosthodontics	<b>5</b>	<b>5</b>

TOS ID	Title	TOS Sub ID	Detail of Title	Weightage %	MCQs
	<b>Maxillofacial Implantology</b>	OMFS-5.2	Osseointegration		
		OMFS-5.3	General Complications and Maintenance		
<b>OMFS-6</b>	<b>Maxillofacial trauma</b>	OMFS-6.1	Initial Management of the Trauma Patient	<b>8</b>	<b>8</b>
		OMFS-6.2	Soft Tissue Injuries		
		OMFS-6.3	Rigid versus Nonrigid Fixation		
		OMFS-6.4	Management of Alveolar and Dental Fractures		
		OMFS-6.5	Principles of Management of Mandibular Fractures		
		OMFS-6.6	Management of Maxillary Fractures		
<b>OMFS-7</b>	<b>Maxillofacial pathology &amp; Reconstruction</b>	OMFS-7.1	Soft and hard tissue cysts of head and neck region and their management	<b>5</b>	<b>5</b>
		OMFS-7.2	Benign and Malignant odontogenic Jaw tumours		
<b>OMFS-8</b>	<b>Oro-facial pain &amp; Temporomandibular joint disorders</b>	OMFS-8.1	Anaesthesia (Local & General, Sedation)	<b>5</b>	<b>5</b>
		OMFS-8.2	Facial pain, Facial palsy and nerve injuries		
		OMFS-8.3	Temporomandibular joint disorders		



## TOS FOR MTA PRACTICAL EXAMINATION

**10 OSCE-Stations (100 Marks)**

**(5 minutes each station)**

TOS ID	Title	Stations
OMFS-01	Basic Principles of Surgery	4
OMFS-02	Principles of Oral & Maxillofacial Surgery	1
OMFS-03	Minor Oral Surgery	2
OMFS-04	Maxillofacial Infections	1
OMFS-05	Dental & Maxillofacial Implantology	
OMFS-06	Maxillofacial trauma	2
OMFS-07	Maxillofacial pathology & Reconstruction	
OMFS-08	Oro-facial pain & Temporomandibular joint disorders	
<b>Total</b>		<b>10</b>

## TOS for Final/Exit Examination MDS (OMFS)

### Final Examination (After completion of 4 years)

The student shall submit completion of training certificate, Log Book, mandatory workshop attendance, thesis on research topic approved by supervisor, through the Dean to the Controller of Examination. If the thesis not approved by the supervisor, application for extension may be recommended by supervisor through Registrar to the AS&RB. The final examination of major subject, thesis evaluation and viva voce examination will be conducted by board of Six (06) examiners in major subjects. The candidate will be examined in major subject and thesis as under: supervisor will not be paper setter /Examiner of his/her candidate as per PMDC regulation 2001.

#### Theory Paper

**200 Marks**

Paper I	Speciality Course MCQs	100 Marks
Paper II	Speciality Course SAQs	100 Marks

#### Viva Voce & Practical

**200 Marks**

Five (05) finished cases of different problems (05 Minutes Each of 04 Marks) **20 Marks**

Viva Voce **40 Marks**

Practical and OSCE/OSPE **140 Marks**

- |    |                   |            |
|----|-------------------|------------|
| a. | Long Case (One)   | (30 Marks) |
| b. | Short Case (Four) | (40 Marks) |
| c. | OSCE              | (70 Marks) |

#### Thesis Defence

**100 Marks**

**TOTAL**

**500 Marks**

### TOS for Theory Paper A & B Final Exit Examination

TOS ID	Titles	Weightage				MCQs	SEQs/ SAQs
		Knowledge	Skill	Attitude	Total %		
<b>OMFS-1</b>	Principles of oral & maxillofacial surgery	03	05	02	<b>10</b>	<b>10</b>	<b>01</b>
<b>OMFS-2</b>	Minor oral surgery	02	06	02	<b>10</b>	<b>10</b>	<b>04</b>
<b>OMFS-3</b>	Maxillofacial infections	03	04	03	<b>10</b>	<b>10</b>	<b>01</b>
<b>OMFS-4</b>	Dental & Maxillofacial Implantology	02	02	01	<b>05</b>	<b>05</b>	<b>01</b>
<b>OMFS-5</b>	Maxillofacial trauma	03	14	03	<b>20</b>	<b>20</b>	<b>04</b>
<b>OMFS-6</b>	Maxillofacial pathology & Reconstruction	04	07	04	<b>15</b>	<b>15</b>	<b>03</b>
<b>OMFS-7</b>	Oro-facial pain & Temporomandibular joint disorders	03	05	02	<b>10</b>	<b>10</b>	<b>02</b>
<b>OMFS-8</b>	Facial deformity & Orthogenetic surgery	02	05	03	<b>10</b>	<b>10</b>	<b>02</b>
<b>OMFS-9</b>	Facial esthetic surgery	02	02	01	<b>05</b>	<b>05</b>	<b>01</b>
<b>OMFS-10</b>	Specialty Journals				<b>05</b>	<b>05</b>	<b>01</b>
<b>TOTAL</b>					<b>100</b>	<b>100</b>	<b>20</b>

The details of these Titles are given below

## Detail of TOS for Theory Paper A & B Final Exit Examination

TOS ID	Titles	TOS Sub ID	Detail of Titles	Weightage %	MCQs	SEQs/SAQs
OMFS-1	Principles of Oral & Maxillofacial Surgery	OMFS-1.1	Diagnosis, history taking, clinical examination, investigations	10	10	01
		OMFS-1.2	Evolution of Maxillofacial surgery			
		OMFS-1.3	Informed consent / medico-legal issues			
		OMFS-1.4	Concept of essential drugs and rational use of drugs			
		OMFS-1.5	Principles of surgery – developing a surgical diagnosis, basic necessities for surgery, aseptic technique, incisions, tissue handling, homeostasis, dead space management, decontamination and debridement, suturing, edema control, patient general health and nutrition.			
		OMFS-1.6	General and hospitalized patient management			
		OMFS-1.7	Maxillofacial radiology / radio diagnosis			
		OMFS-1.8	Pre-Surgical workup			
		OMFS-1.9	Post-Surgical care			
		OMFS-1.10	Wound management			
OMFS-2	Minor Oral Surgery	OMFS-2.1	Medical emergencies	10	10	04
		OMFS-2.2	Local Anaesthesia			
		OMFS-2.3	Exodontia- Simple and complicated+			
		OMFS-2.4	Impacted teeth			
		OMFS-2.5	Pre-prosthetic and Reconstructive Surgery			
		OMFS-2.6	Clinical oral surgery – all aspects of dento alveolar surgery			
OMFS-3	Maxillofacial Infections	OMFS-3.1	Principles of Management of Odontogenic and non-odontogenic Infections	10	10	01
		OMFS-3.2	Airway obstruction / management			
		OMFS-3.3	Sinus Infections			
		OMFS-3.4	Osteomyelitis and Osteoradionecrosis			
OMFS-4	Dental & Maxillofacial Implantology	OMFS-4.1	Dental Implant Planning, Surgery, Prosthodontics	05	05	01
		OMFS-4.2	Osseointegration			
		OMFS-4.3	Soft Tissue Management in Implant Therapy			

TOS ID	Titles	TOS Sub ID	Detail of Titles	Weightage %	MCQs	SEQs/SAQs
		OMFS-4.4	Bone Grafting Strategies for Vertical Alveolar Augmentation			
		OMFS-4.5	The Zygoma Implant			
		OMFS-4.6	Complications and Maintenance			
OMFS-5	Maxillofacial Trauma	OMFS-5.1	Initial Management of the Trauma Patient	20	20	04
		OMFS-5.2	Soft Tissue Injuries			
		OMFS-5.3	Rigid versus Nonrigid Fixation			
		OMFS-5.4	Management of Alveolar and Dental Fractures			
		OMFS-5.5	Principles of Management of Mandibular Fractures			
		OMFS-5.6	Management of Maxillary Fractures			
		OMFS-5.7	Management of Zygomatic Complex Fractures			
		OMFS-5.8	Orbital and Ocular Trauma			
		OMFS-5.9	Management of Frontal Sinus and Naso-orbitoethmoid			
		OMFS-5.10	Gunshot Injuries			
		OMFS-5.11	Pediatric Craniomaxillofacial Fracture Management			
OMFS-6	Maxillofacial Pathology & Reconstruction	OMFS-6.1	Soft and hard tissue cysts of head and neck region and their management	15	15	03
		OMFS-6.2	Benign and Malignant tumours of head and neck region and their management			
		OMFS-6.3	Tissue grafting including local and regional flaps			
		OMFS-6.4	Craniofacial surgery and soft and hard tissue reconstruction			
		OMFS-6.5	Head and neck oncology (Diagnosis & Management)			
		OMFS-6.6	Micro vascular and Micro-neurosurgery surgery			
		OMFS-6.7	Salivary Gland Diseases and Tumours, Diagnosis, Management and complications			
OMFS-7	Oro-facial Pain & Temporomandibular Joint Disorders	OMFS-7.1	Anaesthesia (Local & General, Sedation)	10	10	02
		OMFS-7.2	Facial pain, Facial palsy and nerve injuries			
		OMFS-7.3	Pain control			
		OMFS-7.4	Temporomandibular joint disorders			
		OMFS-7.5	Temporomandibular joint surgeries			
OMFS-8	Facial Deformity	OMFS-8.1	Orthognathic surgery & Surgical orthodontics	10	10	02

TOS ID	Titles	TOS Sub ID	Detail of Titles	Weightage %	MCQs	SEQs/SAQs
	<b>&amp; Orthogenetic Surgery</b>	OMFS-8.2	Craniofacial anomalies			
		OMFS-8.3	Distraction osteogenesis in maxillofacial region			
		OMFS-8.4	Cryosurgeries			
		OMFS-8.5	Cleft lip and palate surgery			
		OMFS-8.6	Surgical and Nonsurgical Management of Obstructive Sleep Apnea			
<b>OMFS-9</b>	<b>Facial Esthetic Surgery</b>	OMFS-9.1	Blepharoplasty	<b>05</b>	<b>05</b>	<b>01</b>
		OMFS-9.2	Basic Principles of Rhinoplasty & Rhytidectomy			
		OMFS-9.3	Forehead and Brow Procedures			
		OMFS-9.4	Skin Rejuvenation Procedures			
		OMFS-9.5	Alloplastic Aesthetic Facial Augmentation			
		OMFS-9.6	Otoplastic Surgery for the Protruding Ear			
<b>OMFS-10</b>	<b>Journals</b>	OMFS-10.1	British Journal of Oral & Maxillofacial Surgery	<b>05</b>	<b>05</b>	<b>01</b>
		OMFS-10.2	American Journal of Oral & Maxillofacial Surgery			
		OMFS-10.3	Pakistan Oral and Dental Journal (Maxillofacial Surgery Section)			

## TOS for Practical/Viva Voce Final Exit Examination

10 OSCE-Stations (70 Marks)

(5 minutes each station)

TOS ID	Title	Stations
OMFS-1	Principles of oral & maxillofacial surgery	01
OMFS-2	Minor oral surgery	02
OMFS-3	Maxillofacial infections	01
OMFS-4	Dental & Maxillofacial Implantology	01
OMFS-5	Maxillofacial trauma	02
OMFS-6	Maxillofacial pathology & Reconstruction	01
OMFS-7	Oro-facial pain & Temporomandibular joint disorders	01
OMFS-8	Facial deformity & Orthogenetic surgery	01
OMFS-9	Facial esthetic surgery	
<b>TOTAL</b>		<b>10</b>



## **LEARNING RESOURCES**



# LEARNING RESOURCES

## List of Essential Readings

### Books:

#### **Latest edition of the all of the following books**

- Scully's Medical Problems in dentistry by Crispian Scully
- Oral Pathology: Clinical Pathologic Correlations by Joseph A Ragezi
- Maxillofacial Trauma and Esthetic Facial Reconstruction by Peter Ward Booth
- Peterson's Principles of Oral and Maxillofacial Surgery by Michael Miloro
- Oral & Maxillofacial Surgery (Volume I, II & III) by Raymond J Fonseca
- Oral & Maxillofacial Trauma by Raymond J Fonseca
- Text Book of Oral & Maxillofacial Surgery by Neelima Anil Malik
- Hand Book of Local Anesthesia by Stanley F Malamed
- Contemporary Oral & Maxillofacial Surgery by Myron R Tucker

### Journals:

#### **Issues of last two years of the following journals**

- British Journal of Oral & Maxillofacial Surgery
- American Journal of Oral & Maxillofacial Surgery
- Pakistan Oral and Dental Journal (Maxillofacial Surgery Section)



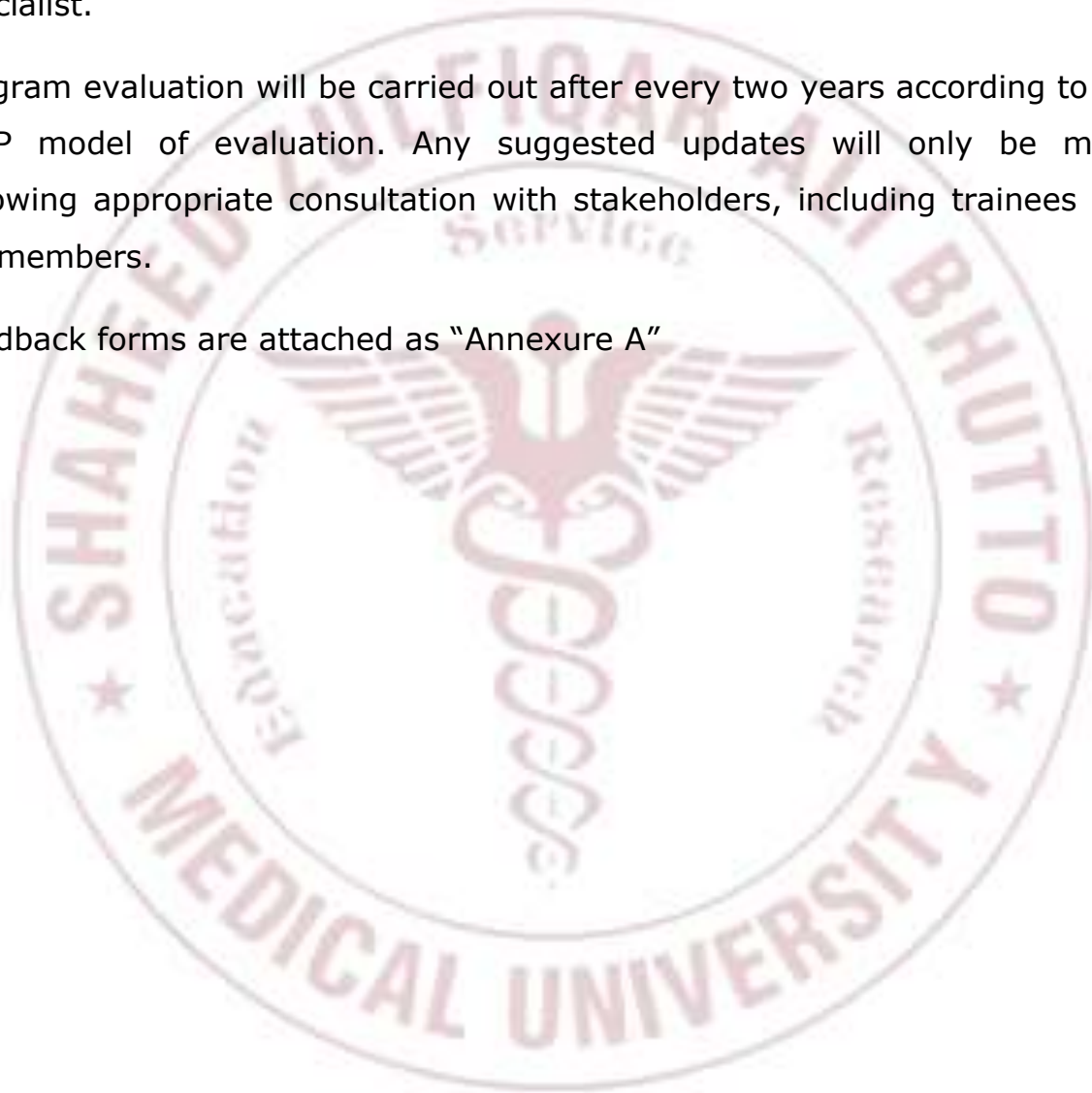
# PROGRAM EVALUATION

## **PROGRAM EVALUATION**

The program director will continue to ensure that the program is fit for purpose in that it provides the trainee with the appropriate knowledge, skills, attitudes and competencies required to meet the requirements of a specialist.

Program evaluation will be carried out after every two years according to the CIPP model of evaluation. Any suggested updates will only be made following appropriate consultation with stakeholders, including trainees and lay members.

Feedback forms are attached as "Annexure A"



# ANNEXURE A

## Supervisor Evaluation Form

Date: \_\_\_\_\_ Supervisor's Name: \_\_\_\_\_

Your Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Evaluations of supervisors by Trainee's are an important process for providing supervisors with an assessment of the quality of their work. Annual supervisor assessments can be used to compliment a supervisor for doing a good job. Annual assessments can also identify areas for improvement. Evaluations can strengthen communications between supervisors and trainee's.

Trainees have three options for evaluating supervisors:

- 1) Completing the Evaluation of Supervisor form.
- 2) Writing a signed memo evaluating the supervisor.
- 3) Meeting with the supervisor's department head.

Evaluations received by the deadline (January 15) will be incorporated into the annual review of the supervisor. Forms and/or signed memos should be sent to the Human Resources department.

\* \* \*

(E=Excellent, G=Good, S=Satisfactory, N=Needs Work, U=Unsatisfactory, Ø=No Opinion)

### Performs Supervisory Functions

Provides on-going positive and negative feedback	E	G	S	N	U	Ø
Makes expectations known	E	G	S	N	U	Ø
Is tactful and considerate	E	G	S	N	U	Ø
Promotes teamwork and good working relationships	E	G	S	N	U	Ø
Recognizes and addresses concerns in a timely manner	E	G	S	N	U	Ø
Delegates authority appropriately	E	G	S	N	U	Ø
Provides training of new employees	E	G	S	N	U	Ø
Provides direction of work	E	G	S	N	U	Ø
Communicates openly and honestly with peers, staff and administration	E	G	S	N	U	Ø

**Comments:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Develops Innovative Procedures**

Is receptive to new ideas	E	G	S	N	U	Ø
Is receptive to questions	E	G	S	N	U	Ø
Encourages initiative and innovation	E	G	S	N	U	Ø

**Comments:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**III. Maintain Positive Works Environment**

Recognizes contributions	E	G	S	N	U	Ø
Motivates workers	E	G	S	N	U	Ø
Provides relaxed yet efficient work atmosphere	E	G	S	N	U	Ø
Encourages staff development	E	G	S	N	U	Ø

**Comments:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Knows the Operations of the Department**

Understands employee workload	E	G	S	N	U	Ø
Is alert to potential problems	E	G	S	N	U	Ø
Keeps staff informed about department and university developments	E	G	S	N	U	Ø

**Comments:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Work Habits**

Acknowledges own limitations and mistakes	E	G	S	N	U	Ø
Maintains a positive work attitude	E	G	S	N	U	Ø
Uses time efficiently and effectively	E	G	S	N	U	Ø
Demonstrates a good work ethic	E	G	S	N	U	Ø

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*Please use the bottom and back of this sheet as space for expanding on any comments above or to make any additional comments.*



## Program Evaluation Form

Please use the following scale to indicate your response to the statements below:

**SA** = strongly agree

**A** = agree

**N** = neither agree/disagree

**D** = disagree

**SD** = strongly disagree

The information was presented effectively	SA	A	N	D	SD
The information presented was practical	SA	A	N	D	SD
The program provided a good working knowledge of the subject matter presented	SA	A	N	D	SD
The program has allowed me to acquire practical skills and knowledge to manage my business more effectively and efficiently	SA	A	N	D	SD
The program attended was sufficient for my purpose	SA	A	N	D	SD



## **ANNEXURE B**

### **Learning Out Comes of Mandatory Rotations**

#### **Accident and Emergency**

Residents are advised and sent to Accident and Emergency department for two months.

Learning objectives are hereby listed below.

At the end of the rotation resident should be able to:

- Familiarize with the treatment of medical emergencies so that they are better able to treat a range of oral emergencies.
- Identify the medical and dental emergencies and formulate the treatment plan for that emergencies.
- Identify the primary systemic abnormalities in a medical emergency and can advised additional diagnostic studies.
- Perform patient's respiration and circulation Support in case of systemic collapse.
- Treat allergic reactions.
- Manage the wound in emergency.
- Demonstrate the early management of patients suffering from bone fractures.

#### **General Surgery**

A two months mandatory rotation is the part of MDS residency in Oral & Maxillofacial Surgery.

At the end of rotation resident must be able to demonstrate the competency in:

- Admitting to service.
- Pre-operative evaluation of the surgical patient.
- Pre-operative, inter-operative, post-operative patient care including fluid and electrolytes status, pulmonary care, cardiovascular function and wound care
- Application of surgical principles of dealing with wound care, wound healing, and wound infection.
- The insertion of central venous access lines, insertion and utilization of chest tubes and general surgical skills and techniques.

### **Anesthesiology and ICU**

A two months Mandatory rotation in department of Anesthesiology and ICU is a part of the residency in MDS Oral & Maxillofacial Surgery. Trainee will be rotating in the said department for the clear understanding of the basic concepts.

Learning objectives are hereby listed below.

At the end of the rotation resident should be able to:

- Demonstrate an understanding of the anesthetic considerations for a variety of medical conditions and perform the appropriate/necessary preoperative assessment/preparation of the patient.
- Demonstrate the necessary steps to conduct appropriate fluid and blood component therapy.
- Recognize and describe the main drug classes frequently used in the perioperative period.
- Review and describe the principles of acute pain management.

- Demonstrate and understand the basic skills in airway management.
- Describe the basics skills of ICU management.

## **Neurosurgery**

A two months rotation in the department of neurosurgery is mandatory for the resident of MDS Oral & Maxillofacial Surgery.

At the end of rotation resident must be able to demonstrate the competency in:

- Recognition in the early management of acute neurological injury.
- Interpretation of cervical spine films, CT Scan Brain.
- Recognition of other imaging methods.
- Management of critically ill patients within the neurosurgical intensive care unit.
- Management of neurosurgical trauma patients as team member of trauma management team.
- Assessment of neurological status of the patient suffering from trauma.

## **Plastic Surgery**

A one month rotation in the department of Plastic surgery is a part of MDS Oral & Maxillofacial Surgery.

At the end of rotation resident must be able to demonstrate the competency in:

- Demonstration of diagnosis and resuscitation of acute burns patients.
- Management of general plastic surgery patients.
- Management of wound care and wound healing.

- Management of head and neck trauma patients from a plastic surgeons perspective.
- Identification and demonstration of management plan for head and neck soft tissue lesion with direct closure.
- Excision and revision of facial scar tissue.
- Management of skin tumors especially of the face.
- Demonstrate the responsibilities of team member in the management of cleft lip and palate patients.
- Know the regional and distant flaps including free vascularized flaps used in head & neck reconstruction.
- Know the steps of microvascular techniques.

### **ENT / Otorhinolaryngology**

A one month Mandatory rotation in department of ENT/Otorhinolaryngology is a part of the residency in MDS Oral & Maxillofacial Surgery.

Learning objectives are hereby listed below.

At the end of the rotation resident should be able to:

- Manage the general otolaryngology/ head & neck surgery patients.
- Demonstrate the pre and post-operative care of head and neck oncology patients.
- Demonstrate the management of head and neck trauma patients from otolaryngologist's perspective.
- Demonstrate the anterior and posterior nasal packing.
- Identify the need of tracheostomy.
- Demonstrate the pre and post tracheostomy care.
- Remove the foreign body from nose and ear.
- Demonstrate the different steps of nasal bone fracture management.

- Demonstrate the Caldwell-sinus antrostomy technique.
- Demonstrate the different steps and pre and post-operative care of patients treated for maxillectomy, mandibulectomy and neck dissection.



