

MDS Oral Surgery

Course Code	Programme Outcome	Name of Programme	Name of course	Course outcome
MDS Oral S-101	<p>1) To obtain proper clinical history, methodical examination of the patient, perform essential diagnostic procedures and order relevant laboratory tests and interpret them and to arrive at a reasonable diagnosis about the surgical condition.</p> <p>2) To perform with competence minor oral surgical procedures and common maxillofacial surgery.</p> <p>3) To treat both surgically and medically (or by other means of the oral and Maxillofacial and the related area).</p> <p>4) Capable of providing care for maxillofacial surgery patients.</p> <p>5) Develop attitude to adopt ethical principles in all aspect 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.</p>	MDS- Oral & Maxillofacial Surgery	Applied basic sciences	<p>The student would be knowledgeable about:</p> <p>Development and growth of face, teeth and jaws, Age changes and evaluation of mandible in detail 1. Congenital abnormality of orofacial regions 2.Surgical anatomy of scalp, temple and face 3. Anatomy and its applied aspects of triangles of neck and deep structures of neck 4.Cranial facial bones and surrounding soft tissues 5.Cranial nerves 6. Tongue 7. Temporal and infratemporal region and Temperomandibular joint in detail 9. Orbits and its contents 10. Muscles of face and neck 11. General consideration of the structure and function of brain and applied anatomy of intracranial venous sinuses 12. Cavernous sinus and superior sagital sinus 13. Brief consideration of autonomous nervous system of head and neck 14. Functional anatomy of mastication, Deglutition and Speech 15. Respiration and circulation 16. Histology of skin, oral mucosa, connective tissue, bone, cartilage, cellularelements of blood vessels, Lymphatic , Nerves, Muscles 17. Tooth and its surrounding structures 18. Cross – sectional Anatomy of the head and neck, as applied in CT, MRI Interpretation 19. Salivary glands – Anatomy, Embryology and Histology APPLIED PHYSIOLOGY 1. Nervous system – physiology of nerve conduction, pain pathway, sympathetic andparasympathetic nervous system,hypothalamus and mechanism of controlling bodytemperature. 2. Blood - its composition hemostasis, blood dyscrasias and its management,hemorrhage and its control, blood grouping, cross matching, blood componenttherapy, complications of blood transfusion, blood substitutes, auto transfusion, cellsavers. 3. Digestive system - composition and functions of saliva, mastication, deglutition, digestion,assimilation, urine formation, normal and abnormal constituents. 4. Respiratory system – respiration control of ventilation, anoxia,</p>

				<p>asphyxia, artificial respiration, hypoxia – type and management 5. CVS - cardiac cycle, shock, heart sounds, blood pressure, hypertension 6. Endocrinology - metabolism of calcium, endocrinal activity and disorder relating to thyroid gland, parathyroid gland, adrenal gland, pituitary gland, pancreas and gonads. 7. Nutrition – general principles balanced diet, effect of dietary deficiency, protein energy malnutrition, nutritional assessment, metabolic responses to stress, need for nutritional support, enteral nutrition, routes of access to GIT, parenteral nutrition, access to central veins, nutritional support 8. Fluid and electrolytic balance / acid base metabolism – the body fluid compartment, metabolism of water and electrolytes, factors maintaining hemostasis causes for treatment of acidosis and alkalosis. APPLIED PATHOLOGY 1. Inflammation – acute and chronic inflammation, repair and regeneration, necrosis and gangrene and role of component system in acute inflammation, role of arachidonic acid and its metabolites in acute inflammation, growth factors in acute inflammation role of NSAIDs in inflammation, cellular changes in radiation injury and its manifestations. 2. Wound management - wound healing factors influencing healing, properties of suture materials, and appropriate uses of sutures. 3. Hemostasis - role of endothelium in thrombogenesis, arterial and venous thrombi, disseminated intravascular coagulation. 4. Hypersensitivity - shock and pulmonary failure, types of shock, diagnosis, resuscitation, pharmacological support, ARDS and its causes and prevention, ventilation and support 5. Neoplasia - classification of tumours, carcinogens and carcinogenesis, spread of tumors, characteristics of benign and malignant tumors, grading and staging of tumours various laboratory investigation. 6. Chromosomal abnormalities with orofacial manifestations. 7. Basics of immunology – primary and acquired immunodeficiencies.</p>
MDS Oral S-			Minor Oral Surgery	The students would be well trained in the assessment and management of: 1. Basic Exodontia 2.

102			and Trauma	<p>Complicated Exodontia 3. Surgical management of Impacted teeth 4. Ectopically positioned and unerupted teeth 5. Tooth Reimplantation and Transplantation 6. Surgical uprighting and Repositioning 7. Principles of Endodontic Microsurgery 8. Periodontal Considerations for Oral Surgery 9. Procedures Involving the Dentogingival Junction 10. Pediatric Dentoalveolar Surgery 11. Lasers in Oral and Maxillofacial Surgery 12. Complications of Dentoalveolar Surgery.</p> <p>The students would be able to diagnose and manage Medical emergencies like, prevention and management of altered consciousness (syncope, orthostatic hypotension, seizures, diabetes mellitus, adrenal insufficiency), hypersensitivity reactions, chest discomfort, and respiratory difficulty</p> <p>The students would be knowledgeable about 1. Diagnosis and Perioperative Management of Head and Neck Injuries 2. Basic Principles of Treatment: Hard and Soft Tissue injuries</p> <p>The students would be acquainted with the knowledge and clinical skills in the management of . 1. Dentoalveolar Injuries 2. Mandibular Fractures 3. Temporomandibular Joint Region Injuries 4. Zygomatic Complex Fractures 5. Orbital Trauma 6. Midface Injuries 7. Frontal Sinus Fractures and associated Injuries 8. Nasal Injuries 9. Soft Tissue Injuries 10. Special Soft Tissue Injuries 11. Avulsive Hard Tissue Injuries 12. Maxillofacial Injuries in Children 13. Maxillofacial Injuries in the Elderly 14. Complex Facial Trauma Patient</p>
MDS Oral S-103			Maxillofacial Surgery	<p>The students would be acquainted with the knowledge and clinical skills in the management of 1. Salivary gland: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 2.</p>

			<p>Temporomandibular Joint: 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</p> <p>Oncology: 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, Radial 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 Orthognathic surgery: Diagnosis and treatment planning, Cephalometric analysis, Model surgery, Maxillary and mandibular repositioning procedures, Segmental osteotomies, Management of apertognathia, Genioplasty, Distraction osteogenesis Cysts and tumor of oro facial region: Odontogenic and non-Odontogenic tumors and their management, Giant lesions of jawbone, Fibro osseous lesions of jawbone, Cysts of jaw</p> <p>Laser surgery: The application of laser technology in surgical treatment of lesions Cryosurgery: Principles, applications of cryosurgery in surgical management Cleft lip and palate surgery: Detailed knowledge of the development of the face, head and neck, Diagnosis and treatment planning Current concepts in the management of cleft lip and palate deformity Knowledge of Naso endoscopy and other diagnostic techniques in the evaluation of speech and hearing Concept of multidisciplinary team management Aesthetic facial surgery: 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,</p>
--	--	--	--

				<p>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</p> <p>Implantology: Principles for the Surgical Placement Of Endosseous Implants, Subperiosteal Implants, The Transmandibular Implant Reconstruction System, Single-tooth Replacement in Oral Implantology, Posterior Implant Restorations For Partially Edentulous Patients, Maxillary Sinus Grafts and Implants, Surgical Implant Failures, Soft Tissue Considerations</p>
MDS Oral S-104			Essay	<p>The students would be able to diagnose, meticulously plan and manage competently various conditions in maxillofacial surgery including challenging cases. They would be knowledgeable about conventional and recent advances in the diagnosis and management of oral and maxillofacial conditions. The students would be well versed in basic surgical techniques and knowledgeable about the advanced skills required in maxillofacial surgery.</p>