1. Brief introduction about the course: The course consists of Lectures, Practical classes and clinical training and is covered in two academic sessions starting from BDS 3rd year and continued till the end of BDS final year.

2. **COURSE OBJECTIVES**: This course is devoted to providing the students with advanced knowledge and skills to manage diseases of oral and maxillofacial region which require surgical interventions or similar procedures. In addition, the students are familiarized with the recent advancement in the oral and Maxillofacial surgery system.

   The whole course is based on theory, practical and clinical classes to cover maximum range of maxillofacial surgery. The students will perform clinical posting in casualty section to deal with various emergency situations in clinical practice.

3. **COURSE OUTCOMES**:
   i. **Knowledge**: To deliver an overview of oral and maxillofacial Surgery, with clinical application of diagnosis and management of such diseases.
   ii. **2. Cognitive skill**: Students should be able to differentiate different types conditions of maxillofacial region and make treatment plans leading to Improved student’s knowledge and refining the patient’s care
   iii. **Interpersonal skill and responsibility**: Evaluation of patient attending oral and maxillofacial surgery clinic, history taking and deciding treatment plan and its execution.
   iv. **Communication Skills and information Technology**: The students should use medical terminology in English verbally. The students should refer to the text book as well as internet and web sites for more information.
   v. **Psychomotor Skills**: Perform surgical and clinical steps. Exhibit skill in by performing clinical and Surgical procedures in oral and maxillofacial surgery patient.

4. **COURSE CONTENT**:

5. **COURSE TEACHING STRATEGIDIES**: Lectures, Audiovisual or clinical demonstrations, Discussions

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<td>1.</td>
<td>Introduction</td>
<td>Definition, scope, aims, and objectives</td>
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<tr>
<td>2.</td>
<td>Diagnosis in oral surgery</td>
<td>History taking, clinical examination, investigations</td>
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| 3.    | Principles of infection control and cross infection control with particular reference to HIV/AIDS and Hepatitis | a) **Asepsis**: definition, measures to prevent introduction of infection during surgery  
1. Preparation of the patient  
2. Measures to be taken by operator  
3. Sterilisation of instruments- various methods of sterilization etc.  
4. Surgery set up.  

 b) **Painless surgery**:  
1. Preanaesthetic considerations, premedication, purpose, drugs used  
2. Anaesthetics considerations  
3. a) Local, b) Local with I. V sedation  
4. Use of general anaesthetic  

 c) **Access**: Intraoral: mucoperiosteal flaps, principles, commonly used in intraoral incisions  
Bone removal: methods of bone removal  
Use of burs: advantages and precautions  
Bone cutting instruments: Principles of using chisel and osteotome  
Extraoral: skin incisions principles, various extraoral incisions to expose facial skeleton  
a) Submandibular  
b) Preauricular  
c) Incision to expose maxilla and orbit  
d) Bicornoral incision  

d) **Control of hemorrhage during surgery**:  
Normal hemostasis |
Local measures available to control bleeding Hypotensive anaesthesia etc

drainage & debridement

Purpose of drainage in surgical wound type of drains used
Debridement: purpose soft tissue and bone debridement

Closure of wounds:
Suturing, principles, suture material, classification, body response to various materials etc.

Postoperative care:
Postoperative instructions,
Physiology of cold and heart,
Control of pain analgesics,
Control of infection antibiotics,
Control of swelling anti-inflammatory drugs long term postoperative follow up significance

Drainage & Debridment

Purpose of drainage in surgical wounds:
Type of drainage used
Debridement: purpose soft tissue and bone debridement

5. Exodontia

General considerations ideal extraction indications for extraction of teeth extraction in medically compromised patients.
Methods of extraction:
a) Forceps or intraalveolar or closed method. Principles types of movement force etc.
b) Transalveolar surgical or open method indications surgical procedure.
Dental elevators: uses classification principles in the use of elevators commonly used elevators.
Complications of exodontias:
Complications during exodontias:
Common to both, maxilla and mandible.
Postoperative complications:
Prevention and management of complications.

6. Medical emergencies in dental practice

Primary care of medical emergencies in dental practice particularly:
a) Cardiovascular
b) Respiratory
c) Endocrine
d) Anaphylactic reaction
e) Epilepsy

7. Emergency drugs intramuscular I.V.

Injections:
Applied anatomy ideal location for giving these injections techniques etc

8. Ethics

9. Local anaesthesia:

Use of vasoconstrictors in local anaesthetic solution
Advantages contraindications various vasoconstrictors used.
Anaesthesia of the mandible
Pterygomandibular space boundaries contents etc.
Inferior dental nerve block various
Techniques
Complications
Mental foramen nerve block
Anaesthesia of maxilla
Infraorbital nerve block
Posterior superior alveolar nerve block
Maxillary nerve block techniques.

Schedule for B.D.S. Final Year Lecture

COURSE TEACHING STRATEGIES: Lectures, Audiovisual or clinical demonstrations,
Discussions

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<th>S. No</th>
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| 1.    | Impacted teeth      | Incidence definition etiology  
Impacted mandibular third molar 
Classification reasons for removals 
Assessment both clinical & radiological. 
Armamentarium and surgical procedures for removal. 
Complications during and after removal, its prevention and management. 
Maxillary third molar indications for removal classification Armamentarium and surgical |
| 3. | Implants | Concept of osseointegration, History of implants, their design & surface characteristics, Knowledge of various types of implants, Bone biology, Morphology, Classification of bone and its relevance to implant placement, Bone augmentation materials, Soft tissue considerations in implant dentistry. Surgical procedure to place implants. |
| 4. | Diseases of the maxillary sinus | Surgical anatomy and development of the sinus. Sinusitis both acute and chronic, surgical approach of sinus – Caldwell-Luc procedure, Knowledge of FESS, Removal of root from the sinus, Oro-antral fistula and communications–etiology, clinical features and surgical methods for closure. |
| 5. | Cysts of the mouth and jaws | Definition, classification, pathogenesis. Diagnosis – Clinical features, radiological, FNAC, use of contrast media and histopathology. Management – Type of surgical procedures, Rational of the techniques, indications, contraindications, procedures, complications etc. |
| 7. | Pre-prosthetic Surgery | Definition, Classification of procedures, Corrective procedures: Alveoloplasty, Reduction of maxillary tuberosities, Frenectomies and removal of tori. Ridge extension or Sulcus extension procedures, Indications and various surgical procedures, Ridge augmentation and reconstruction, Indications, use of bone grafts, hydroxyapatite etc. |
| 11. | Osteomyelitis of the jaws | Definition, etiology, predisposing factors, classification, clinical features and management. |
| 13. | Osteoradionecrosis | Definition, etiology, theories, predisposing factors, classification, clinical features and management. |
17. Disorders of T. M. joint
- Applied surgical anatomy of the joint
- Development of the TMJ
- Surgical approaches to TMJ
- Radiological investigations
- Hypermobility of TMJ: Dislocation – Types, etiology, clinical feature and management.
- Hypomobility of TMJ: Classification, Ankylosis – Definition, etiology, clinical features and management, Myo-facial pain dysfunctions syndrome, etiology, clinical features, management – Non-surgical and surgical.
- Internal derangement of the joint.
- Inflammatory Diseases of T. M. joint Arthroscopy

18. Robotic Surgery and Endoscopy
- Introduction, Basic concept and their application in the field of Oral and Maxillofacial Surgery

**SUGGESTED REFERENCES:**

1. Contemporary Oral and maxillofacial Surgery by Hupp
3. Peterson’s Principles of oral and maxillofacial Surgery by Michael Miloro, GF Ghali
4. A Text book of Local Anesthesia by Malamed