

# KING SAUD UNIVERSITY

## COLLEGE OF DENTISTRY

### Department of Maxillofacial Surgery & Diagnostic Sciences

#### Division of Oral & Maxillofacial Surgery

|              |                                |  |                  |
|--------------|--------------------------------|--|------------------|
| Course name  | Clinical Oral Surgery          | إكلينيكية جراحة الفم                   | إسم المقرر       |
| Course code  | 411 MDS                        | راس 411                                | رقم المقرر ورمزه |
| Credit hours | 3 hrs (1 lecture and 2 clinic) | 3 ساعات – ساعة محاضرة<br>وساعتان عيادة | عدد الساعات      |
| Prerequisite | 311 Oral Surgery               | 311 جراحة الفم والممارسة العامة        | المتطلب السابق   |

#### نبذة مختصرة عن المقرر:

هذا المقرر يعطي الطالب فرصة الاستفادة من المعلومات الأساسية والمتقدمة في جراحة الفم بما فيها التطبيق الإكلينيكي المتقدم والذي يشمل خلع الأسنان والعمليات الصغرى. كما يعطي الطالب الفرصة لمشاهدة العمليات الكبرى في غرفة العمليات ويتعلم كيفية متابعة المرضى داخل المستشفى.

#### ▪ Course Description

This is mainly a clinical course in advanced oral surgery which is designed to get the dental student to carry out more complicated minor oral surgical procedures under local anesthesia. Cases such as retained roots, impacted teeth, alveoloplasty, and management of orofacial infections are given to the student to treat under faculty supervision.

Students are also introduced to hospital rules and protocol, which include medical records, doctor's orders, progress notes, laboratory and radiographical results, temperature/pressure/respiration graphics, operation notes and discharge summary.

The second semester includes a series of formal lectures that covers topics in major oral and maxillofacial surgery which were not adequately covered during previous oral surgery courses.

- **Course objectives**

- 1- Patient assessment and examination with a scientific identification of the surgical problems
- 2- Appropriate sequence of surgical care in the overall treatment plan
- 3- Student should recognize when it is appropriate to refer patients to a specialist.
- 4- Student should learn how to interpret the results of the physical evaluation and understand the findings that will alter and influence treatment
- 5- Discuss findings, diagnosis, and treatment plan options with the patient and to obtain informed consent to carry the treatment.
- 6- Control of patients' pain and anxiety through the use of local anesthesia and other procedures.
- 7- Development of confidence, respect, and trust in the patient-care relationship
- 8- Diagnosis and management of complications resulting from minor surgical procedures with appropriate patient follow up.
- 9- Writing prescriptions and understanding the use of prescription drugs in the practice of minor oral surgery.
- 10- Student can perform the following procedures: uncomplicated extraction of single or multi-rooted, non-impacted teeth; uncomplicated removal of fractured or residual root tips; uncomplicated pre-prosthetic surgery; uncomplicated biopsy of soft tissues; management of uncomplicated infections of dental origin; and assessment and management of impacted teeth under a close supervision.
- 11- The student should by the end of the course be able to carry out routine minor oral surgical procedures which include flap designs, cutting of alveolar bone by the use of surgical burs and bone files. He should also be familiar with suturing techniques, suture materials and needles.
- 12- The student will have a clear idea about in patient oral and maxillofacial surgery patient, through weekly visits to the hospitals. Special emphasis is put on facial trauma, orthognathic surgery cases and management of benign and malignant tumors.

- **Course outline**

- **Lectures topics**

- 1- Hospital based surgery and review of applied anatomy
- 2- Management of medically compromised patients
- 3- Medical emergencies in dental clinic
- 4- Medications and prescription
- 5- Sedation in surgery
- 6- Surgical management of bone pathology
- 7- Preprosthetic surgery
- 8- Dental implants

- 9- Management of facial trauma
- 10- Orthognathic surgery [1]
- 11- Orthognathic surgery [2]
- 12- TMJ surgery
- 13- Surgical management of cleft lip and palate
- 14- Salivary glands surgery

- **Clinical sessions**

The 411 MDS male students at the DUC are divided in to four groups. Each group (around 14 students) has its own clinical session. Female students at the MUC have only one clinical session. These groups will have their clinical sessions and the visits to the hospitals in their allocated clinical sessions alternately. The female students are divided into four groups depending on the number registered for the course. One group visits the Riyadh Central Hospital or KKHU once a week accompanied by a senior faculty member of the division of oral and maxillofacial surgery. The rest of the students – meanwhile – will carry out advanced minor oral surgical procedures at the College of Dentistry supervised by members of the division of oral and maxillofacial surgery. Students cases are recorded on a log book and countersigned by an attending faculty. The groups of students will alternate visiting the hospital according to pre-arranged schedule.

- **Hospital sessions:**

Students attending the hospital sessions will be instructed in the following:

- Hospital admission polices
- Clerking of patients
- Informed consent
- Routine and special hospital investigations
- Communication with other specialties and referrals
- gowning and gloving
- Pre surgical patients preparations
- preparation and draping in the OR
- Fluid balance
- Pre operative medications
- Insulin sliding scale
- Principles inside the OR
- Writing operation reports and post operative medications
- Patient recovery
- Dealing with complications
- Policies of the surgical intensive care unit
- Follow up of the patient in the ward
- Discharge criteria
- Continuous patient follow up

▪ **Lecture topics in details [contents]:**

During the second semester a series of formal lectures will be given to students. The topics are as follows:

1. Hospital based surgery and review of applied anatomy:  
Type of cases treated in hospital, admission, drugs, and consultations, laboratory tests normal and abnormal values. Doctors orders, Informed consent. The lecture includes a quick review of the major nerve and blood supply to the head and neck as they are very important in understanding the surgical procedures.
2. Management of medically compromised patients:  
Review of how to manage patients with different diseases which can affect the surgical procedures performed on this patient. Examples include patients with diabetes mellitus, hypertension, thyroid disorders, and pregnant woman. Methods to prevent complications in those cases.
3. Medications and prescription:  
Different drugs used by dentists. Antibiotics and analgesics, side effects, allergic reaction and anaphylactic shock
4. Sedation in oral and maxillofacial surgery  
Anxiety and apprehension, Nitrous oxide and relative analgesia, I.V. sedation: advantages and risks. Medications used in I.V. sedation. Precautions.
5. Surgical management of bone pathology:  
Different surgical procedures used in treating bone pathology. For example how to manage fibrous dysplasia, tumors and cysts.
6. Orthognathic surgery I: pp 325-367; Oral Surgery -Pederson  
Definition and history, plan of orthognathic cases. Role of orthodontist and oral surgeon, joint treatment sessions. Segmental osteotomy.
7. Pre-prosthetic surgery  
Introduction and terminology: Alveoloplasty [single tooth and multiple sites], removal of tori, other osseous procedures. Soft tissue preparation, frenectomy, tuberosity reduction, surgery for immediate denture. Vestibuloplasty, ridge augmentation, implants.
8. Dental implants  
Principles of implantology. Patients assessment. Systems available to dentists. Osiointegration.

9. Management of trauma:  
An update on management of facial trauma which will help the student in their hospital visits. This include the management of mandibular fractures, midface fractures and other facial fractures
- 10-11. Orthognathic surgery  
Diagnosis, planning, and surgical procedures to correct different facial deformities. For example Le Fort osteotomies, sagittal splits techniques.
12. TMJ surgery  
Anatomy of the TMJ, different surgical procedures to treat ankylosis and dislocation. Conservative treatment versus surgical treatment. Complications.
13. Surgical management of cleft lip and palate:  
Surgical procedures (flaps) to manage the cleft lip and palate cases. Timing of surgery, effect on the growth. Team management. Alveolar cleft grafting.
14. Salivary glands diseases:  
Anatomy of salivary glands. Pathological conditions affecting the glands. Diagnosis of diseases affecting salivary glands. Treatment of: stones, mucoceles, ranulas, infections, neoplasms [benign and malignant].

- **Methodology**

Didactic + clinical

- **Evaluation and Grading:**

First semester

- 1- Topic review/update report (5 marks)
- 2- End of term exam (hospital based teaching) (10 marks)

Second semester

- 3- Midterm written exam (15 marks)
- 4- Final written exam (40 marks)
- 5- Final clinical/viva (30 marks)

- **Required textbooks:**

**Textbook of General and Oral Surgery** By Wray, Lee, Clark, and Stenhouse (2003).

- **Reference textbooks:**

**Contemporary Oral and Maxillofacial Surgery** By Peterson, Ellis, Hupp, Tucker; 4 edition (2003)