

Oral surgery

A course concerned with teaching surgical tools, sterilization, anesthesia, extraction methods, mechanics and types.

Theoretical: A practical subject based on understanding, as it is your guide throughout your practice of the profession, follow-up and focus during lectures, your approach to excellence, as well as taking influential notes and explained cases.

Practical: Apply what you have learned from the basics of anesthesia and the techniques of normal and surgical extraction

Different Learning Methods in the Department of Dentistry

A- Auditory method: This method depends on communicating information in the form of sounds that are heard by the learner for analysis and storage.

B- Visual method: in which information is communicated by displaying color images, videos or any form of visual educational aids.

C- Reading method: It is one of the methods that depend on reading information to understand and store it.

D. Interdisciplinary professional education where dental students collaborate with other healthcare professionals, to promote a holistic approach to patient care.

Different evaluation methods for students in the Department of Dentistry

Daily tests with multiple-choice questions for subjects that require practical skills.

B- Daily exams with practical questions.

C- Semester and final exams.

D- Setting grades for the assigned homework .

H- Grades of participation of questions competing for the subjects of study.

G- Daily evaluation of the student's work in scientific laboratories and educational clinics.

Learning Outcomes for Dental Courses

Using health information technology in oral and dental health care effectively.

Apply appropriate professional, ethical and legal standards in the provision of patient care in accordance with health care rules and regulations.

Providing graduates with scientific knowledge and professional skills in the fields of oral and dental surgery, dental prosthesis, dental preservation,

orthodontics, pediatric dentistry, periodontal pathology and surrounding tissues, as well as community dentistry.

Knowledge of the principles of oral and dental health and understanding of the development, prevention and treatment of related diseases

Health promotion and disease prevention to serve the community.

Integrating basic and medical sciences into healthcare practice.

Develop decision-making and problem-solving skills in healthcare.

Evaluate the state of oral and dental health and the medical condition of the patient, request the necessary diagnostic analyzes, and interpret the results of various analyzes to reach the appropriate diagnosis.

Prepare a care plan for the prevention and treatment of diseases taking into account the needs of the patient.

Demonstrate competence in performing procedures safely in all aspects of dentistry and prevent injuries arising from treatment.

Providing graduates with theoretical knowledge and laboratory and clinical skills that increase the effectiveness of diagnosis.

Preparing dental graduates and training them to become distinguished in various fields of dentistry.

Lesson name and units

<i>Subject</i>	<i>1st Semester hours/week</i>		<i>2nd Semester hours/week</i>		<i>Units</i>	<i>Code</i>
	<i>Theory</i>	<i>Practical</i>	<i>Theory</i>	<i>Practical</i>		
5. Oral Surgery	1	2	1	2	4	OS322

1-Subject title	Oral Surgery	
2-Number of credits	Theory:2	Clinical:2
3-Number of contact hours	Theory:1 h/wk.	Laboratory:2 h/wk.
4-Subject time	Third Year	

No.	Title of lectures	Hours
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1	Diagnosis in oral surgery <ul style="list-style-type: none"> ➤ History taking <ul style="list-style-type: none"> • Demographic data • Chief complaint • History of present complaint • Past dental and medical history • Social and family history 	1
2	Diagnosis in oral surgery <ul style="list-style-type: none"> ➤ Examination <ul style="list-style-type: none"> • Extra-oral examination • Intra-oral examination ➤ Differential diagnosis ➤ Diagnosis of pain, lump, and ulcer ➤ Consent 	1
3	Infection Control in Surgical Practice <ul style="list-style-type: none"> ➤ Communicable pathogenic organisms ➤ Aseptic techniques <ul style="list-style-type: none"> • Terminology • Concepts • Techniques of Instrument Sterilization; Sterilization with Heat; Sterilization with Gas • Techniques of Instrument Disinfection 	1
4	Infection Control in Surgical Practice <ul style="list-style-type: none"> • Maintenance of Sterility • Surgical Field Maintenance • Operatory Disinfection • Surgical Staff Preparation • Postsurgical Asepsis 	1
5	Extraction of teeth and Contra indications of extraction <ul style="list-style-type: none"> • Extraction of teeth (exodontia). • Definition. • Methods of extraction. • Indications of teeth extraction. 	1

	<ul style="list-style-type: none"> ✓ Severe caries. ✓ Severe periodontal disease. ✓ Pulp pathology. ✓ Apical pathology. ✓ Orthodontic reasons. ✓ Prosthetic considerations. ✓ Impacted teeth. ✓ Supernumerary teeth. ✓ Tooth in the line of fracture of the jaws. ✓ Teeth in relation with pathological conditions. ✓ Retained roots. ✓ Prior to irradiation. ✓ Focal sepsis. ✓ Aesthetic. 	
6	<p>Extraction of teeth and Contra indications of extraction</p> <ul style="list-style-type: none"> • Contra-indications of teeth extraction. <ul style="list-style-type: none"> ➤ Local contra-indications. ➤ Systemic contra-indications. • Pre-extraction evaluation. <ul style="list-style-type: none"> ➤ Clinical preoperative evaluation. <ul style="list-style-type: none"> ✓ General evaluation. ✓ Local evaluation. ➤ Radiological evaluation. ➤ Objectives and benefits 	1
7	<p>General arrangement for extraction and Dental forceps (types)</p> <ul style="list-style-type: none"> • Light. • Position of the operator. • Position of the patient. • Height of the dental chair. • Parts of dental forceps. • Forceps for the maxillary teeth. <ul style="list-style-type: none"> ✓ Forceps of upper anterior teeth. ✓ Forceps of upper premolars. ✓ Forceps of upper molars. ✓ Bayonet of upper posterior teeth. 	1
8	<p>General arrangement for extraction and Dental forceps (types)</p> <ul style="list-style-type: none"> • Forceps for the mandibular teeth. <ul style="list-style-type: none"> ✓ Forceps of lower anterior teeth. ✓ Forceps of lower premolars. ✓ Forceps of lower molars. ✓ Bayonet of lower posterior teeth. • Mechanical principle of forceps (traditional) extraction. 	1

	<ul style="list-style-type: none"> • Physic forceps. ✓ Parts. ✓ Mechanical principle and technique 	
9	Techniques of forceps extraction and post-operative instructions <ul style="list-style-type: none"> • Soft tissue retraction. • Handling of the forceps. • Cheek retraction and support (the use of the non-working hand). • The application of the forceps blades to the tooth (tooth grasp). • The displacement of the tooth from its socket. • Post-operative care to the extraction socket. • Instruction to the patient. 	1
10	Elevators <ul style="list-style-type: none"> • Line of withdrawal. • Point of application. • Parts of dental elevators. • Mechanical principles of using dental elevators. • Wheel and axil. • Fulcrum. • Wedging. • Combination of mechanical principles. 	1
11	Elevators <ul style="list-style-type: none"> • Clinical uses of elevators. • Straight elevators. • Coupland's chisel. • Cryer's elevator. • Winter's elevator. • Apexo elevator. • Warwick-James elevator. • Guiding principles for using dental elevators. • Complications of using dental elevators. 	1
12	Complications of dental extraction <ul style="list-style-type: none"> • Failure to secure anesthesia. • Failure to remove the tooth with either forceps or elevator. • Fracture (#) of crowns and roots, alveolar bone, maxillary tuberosity, adjacent or opposing tooth, mandible. • Dislocation of the tempro-mandibular joint (T.M.J.). • Displacement of a root into the soft tissue and tissue spaces and the maxillary antrum. 	1
13	Complications of dental extraction	1

	<ul style="list-style-type: none"> • Excessive bleeding after extraction. • Damage to the surrounding soft tissues. • Post-operative pain. • Post-operative swelling. • Creation of an oro-antral communication. • Trismus. 	
14	<p>Basic surgical instruments</p> <ul style="list-style-type: none"> • Instruments of basic oral surgery. • Instruments to incise tissues. • Instruments for elevating mucoperiosteum. • Instruments for controlling hemorrhage. <ul style="list-style-type: none"> ✓ Hemostat (artery forceps). • Instruments to grasp tissues. <ul style="list-style-type: none"> ✓ Toothed-tissue forceps. ✓ Allis tissue forceps. • Instruments for removing bone. <ul style="list-style-type: none"> ✓ Ronger forceps (bone cutter and bone nibbler). ✓ Chisel and mallet. ✓ Bone file. ✓ Surgical burs and handpiece. • Instruments to remove soft tissues from bony defects. <ul style="list-style-type: none"> ✓ Surgical curette. • Instruments for suturing mucosa. <ul style="list-style-type: none"> ✓ Needle holder. ✓ Needles. ✓ Suture materials ✓ Scissors. • Instruments for retraction of soft tissues. <ul style="list-style-type: none"> ✓ Cheek retractor. ✓ Mucoperiosteal flap retractor. • Instruments for irrigation and for providing suction. • Instrument of draping 	1
15	<p>Introduction to local anesthesia</p> <ul style="list-style-type: none"> • Neurophysiology • Mode and site of action of local anesthetic • Active forms of local anesthetics 	1
16	<p>Pharmacology of local anesthesia</p> <ul style="list-style-type: none"> • Pharmacokinetics of local anesthetics • Metabolism • Systemic actions of local anesthetics 	1
17	<p>Pharmacology of local anesthesia</p> <ul style="list-style-type: none"> • Vasoconstrictors • Mode of action 	1

	<ul style="list-style-type: none"> • Dilutions of vasoconstrictors • Specific agents 	
18	Surgical anatomy in local anesthesia <ul style="list-style-type: none"> • Trigeminal nerve: <ul style="list-style-type: none"> ✓ Ophthalmic branch ✓ Maxillary branch ✓ Mandibular branch 	1
19	Surgical anatomy in local anesthesia <ul style="list-style-type: none"> • Osteology of the maxilla • Osteology of the mandible 	1
20	Instruments of local anesthesia <ul style="list-style-type: none"> • The Syringe • The Needle • The Cartridge • Additional Armamentarium • Preparation of the Armamentarium 	1
21	Techniques of local anesthesia <ul style="list-style-type: none"> • Basic injection techniques • Techniques of maxillary anesthesia <ul style="list-style-type: none"> ✓ Local infiltration. ✓ Posterior superior alveolar nerve block ✓ Middle superior alveolar nerve block ✓ Anterior superior alveolar nerve block (infraorbital nerve block) ✓ Greater palatine nerve block ✓ Nasopalatine nerve block ✓ Maxillary nerve block 	1
22	Techniques of local anesthesia <ul style="list-style-type: none"> • Techniques of local anesthesia <ul style="list-style-type: none"> ✓ Techniques of mandibular anesthesia ✓ Inferior alveolar nerve block ✓ Buccal nerve block ✓ Mandibular nerve block: The Gow-Gates technique ✓ Vazirani-Akinosi closed-mouth mandibular block ✓ Mental nerve block ✓ Incisive nerve block 	1
23	Techniques of local anesthesia <ul style="list-style-type: none"> • Supplemental injection techniques <ul style="list-style-type: none"> ✓ Intraosseous injection ✓ Periodontal ligament injection ✓ Intraseptal injection ✓ Intrapulpal injection 	1
24	Complications of local anesthesia <ul style="list-style-type: none"> • Local Complications <ul style="list-style-type: none"> ✓ Needle breakage ✓ Prolonged anesthesia (paresthesia) ✓ Facial nerve paralysis ✓ Ocular complications 	1

	<ul style="list-style-type: none"> ✓ Trismus ✓ Soft tissue injury ✓ Hematoma 	
25	Complications of local anesthesia <ul style="list-style-type: none"> ✓ Pain on injection ✓ Burning on injection ✓ Infection ✓ Edema ✓ Sloughing of tissues ✓ Postanesthetic intraoral lesions 	1
26	Complications of local anesthesia <ul style="list-style-type: none"> • Systemic complications <ul style="list-style-type: none"> ✓ Overdose ✓ Allergy 	1
27	Advances in local anesthesia <ul style="list-style-type: none"> • Computer controlled local anesthetic delivery • Articaine hydrochloride • Local anesthesia reversal • Buffering of local anesthetic solution • Nasal local anesthetic mist for maxillary nonmolar teeth 	1
28	Conscious sedation <ul style="list-style-type: none"> • Sedation techniques: Oral, sublingual, transdermal, intranasal, intramuscular, intravenous and inhalational • Nitrous oxide • Complications and medicolegal considerations 	1
29	Fundamentals of general anesthesia <ul style="list-style-type: none"> • Types of general anesthesia used in dentistry • Advantages • Disadvantages • Indications • Contraindications 	1
30	Medical emergencies during dental treatment <ul style="list-style-type: none"> • Overview of medical emergencies • Basic measures, equipment and drugs • Common emergencies <ul style="list-style-type: none"> ✓ Collapse ✓ Anaphylaxis ✓ Cardiac arrest ✓ Diabetic collapse due to hypoglycemia ✓ Fits and convulsions ✓ Adrenal crisis ✓ Acute severe asthma ✓ Chest pain 	1
Total		30

يُتألف الجانب العملي من مختبرات عملية بواقع ساعتين اسبوعياً و 60 ساعة سنوياً ويشمل المواضيع التالية:

Laboratory sessions & <i>Clinical requirements</i>	
	<ul style="list-style-type: none"> • History taking: Includes patient communication skills, chief complaint, past dental history, medical history and family history, risk assessment associated with common medical conditions with regards to dental extraction. • Clinical examination and diagnosis: Components of clinical examination with demonstration of extra oral and intra oral examination (lymph node palpation, TMJ palpation with the focus on the accused tooth/teeth), diagnosis of cases in patients case sheet with regards to dental extraction • Basic surgical instruments I: Instrument to incise tissue, instrument for control of hemorrhage, instrument for grasping tissues, instruments for reflection of mucoperiosteal flap, instrument for cutting the bone • Basic surgical instruments II: Instruments of retracting the cheek and mucosa, instruments of suturing, types of suture materials, types of suturing needles, instrument for suction, instruments of irrigation, instruments of patient draping and cable management. • Dental forceps I: Indication of using dental forceps, part of a dental forceps, forceps of maxillary teeth. • Dental forceps II: Forceps of mandibular teeth, physics forceps. • Dental elevators I: Indications, mechanical principles of using elevators, straight elevators, Coupland chisel, Winters elevator • Dental elevators II: Cryers elevator, apixo elevator, Warwick-James elevator, periostomes, guiding principles of using dental elevators. • Local anesthetics (instruments & materials). Demonstartion of local anesthetic dental syringe, dental injection needles, types of different local anesthetics, topical measures of injection pain reduction, automatized injectors • Maxillary injection techniques: Hands on demonstration on special manikin of Infiltration of upper anterior teeth, infiltration of premolars and molars, nerve block of long sphenopalatine and greater palatine nerves, periodontal ligament injection. • Mandibular injection techniques. Hands on demonstration on special manikin of infiltration injections, and inferior alveolar nerve block, long buccal nerve block and mental nerve block, periodontal ligament injection and intra-bony injections. • Maxillary teeth extraction: Hand on demonstration on manikin of maxillary teeth extraction with dental forceps.

	<ul style="list-style-type: none">• Mandibular teeth extraction: Hands on demonstration on manikin of mandibular teeth extraction with dental forceps.• Basic life support and CPR: Demonstration of how to perform emergency evaluation of fainted patients (A,B,C,D,& E), administration of oxygen, establishing IV line, IM injection, Heimlich maneuver, and cardiopulmonary resuscitation.	
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