



Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

Course Specifications

Oral Surgery and General Practice

Hesham Marei

Course Specifications

Institution: University of Dammam	Date of Report: 1/09/2014
College/Department: College of Dentistry, Biomedical Dental Sciences Department	

A. Course Identification and General Information

1. Course title and code: Oral Surgery & General Practice (BDS 421)					
2. Credit hours: 4 Credit hours					
3. Program(s) in which the course is offered. Dental Science (If general elective available in many programs indicate this rather than list programs)					
4. Name of faculty member responsible for the course: Hesham Marei					
5. Level/year at which this course is offered: 4th year (first semester)					
6. Pre-requisites for this course (if any) Applied surgical anatomy, local Anaesthesia, and exodontia (BDS 312)					
7. Co-requisites for this course (if any) N/A					
8. Location if not on main campus: College of Dentistry					
9. Mode of Instruction (mark all that apply)					
a. Traditional classroom	<input checked="" type="checkbox"/>	<input type="text"/>	What percentage?	70%	<input type="text"/>
b. Blended (traditional and online)	<input type="checkbox"/>	<input type="text"/>	What percentage?	30%	<input type="text"/>
c. E-learning	<input checked="" type="checkbox"/>	<input type="text"/>	What percentage?	30%	<input type="text"/>
d. Correspondence	<input type="checkbox"/>	<input type="text"/>	What percentage?		<input type="text"/>
f. Other	<input type="checkbox"/>	<input type="text"/>	What percentage?		<input type="text"/>
Comments:					

B Objectives

1. What is the main purpose for this course?

The aim of this course is to enable students to perform patient examination, formulate a treatment plan, and perform local anaesthesia, and simple extraction. The students will be introduced to the principles of managing impacted teeth, cysts, dental implants, facial infections and fractures. In addition, they will learn how to display a professional behavior towards patients and all members of the dental team. **The main learning outcomes for students enrolled in the course are:**

- A. Evaluate patients with various dento-alveolar problems.
- B. Analyze and interpret data collected from the patient's history, clinical, radiographic and other investigations.
- C. Formulate a comprehensive, sequential treatment plan based on the diagnostic findings.
- D. Perform simple extraction of erupted teeth, and burred roots under local anaesthesia.
- E. Manage the most common complications, which may arise during and after dento-alveolar surgical procedures.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- A. Adding one new unit that is dealing with Medico-legal ethics, to cover the area of professionalism in oral surgery practice.
- B. Focusing in the lecture on the main concepts and giving the students more room to self-directed learning through the E-learning platform (Blackboard).
- C. Increasing the number of students' assignments, and formative assessment to drive their learning.
- D. Increase the number of virtual patients to improve the structure and organization of their knowledge.
- E. Improving the reference materials by incorporating high quality articles that are targeting the learning objectives.

C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1 Topics to be Covered		
List of Topics	No of Weeks	Contact hours
<p><u>Basic surgical Principles and Techniques:</u></p> <ul style="list-style-type: none"> • Asepsis. • Control and prevention of wound infection. • Needle stick injury and its recommendations for prevention. • Different flap designs. • Wound repair including suturing materials, and techniques. 	1	2
<p><u>Surgical removal of impacted teeth:</u></p> <ul style="list-style-type: none"> • What is an impacted tooth? Incidence, and aetiology. • Indications and contraindications for removal of impacted or embedded teeth. • Patient evaluation, radiological localization and diagnosis of impacted teeth. • Diagnosis and treatment of pericoronitis. • Classification of impacted mandibular third molars. • The criteria that determine the relative degree of difficulty in the removal of impacted mandibular third molars. • Surgical techniques for removal of mandibular impacted teeth. • Hazards, precautions and solutions to problems associated with removal of mandibular impacted teeth including neurological dysfunction. • Classification of impacted maxillary third molar • Surgical technique for removal of maxillary third molar • Classification of impacted maxillary canine. • Different treatment options for impacted maxillary canine. • Surgical techniques for removal of maxillary impacted canine. 	11/2	3
<p><u>Maxillary sinus:</u></p> <ul style="list-style-type: none"> • The anatomy of the maxillary sinus. • Aetiology, signs & symptoms, investigations and management of maxillary sinusitis. • Aetiology and management of an oro-antral fistula. 	1/2	1
<p><u>Dento- alveolar Complications:</u></p> <ul style="list-style-type: none"> • Dento-alveolar complications with special emphasis on classification of nerve injuries. 	1/2	1

<p><u>Cystic lesions of the jaw:</u></p> <ul style="list-style-type: none"> • Classification of cysts. • Clinical presentation including progression, examination and assessment and the effects on adjacent structures. • Special investigations - the use of radiography, role of aspiration, vitality tests, the use of plain and scanning radiographs. • Differential diagnosis. • Different treatment options (enucleation, marsupialization, Surgical decompression) 	1	2
<p><u>Odontogenic Infection:</u></p> <ul style="list-style-type: none"> • Pathophysiology of infection. • Clinical presentations, signs and symptoms, special investigations and management of acute dento-alveolar abscess. • Clinical presentations, management of acute pericorinitis. • Pathway of dental infection. • Abscess versus Cellulitis & Edema. • The principles of management of infection: General, and local measures - including incision and drainage. • Spread of infection to different facial and neck spaces. • Severe complications including Ludwig's angina, cavernous sinus thrombosis, mediastinitis. • Osteomyelitis of the jaws, Classification, Predisposing factors, Etiology and pathogenesis, Microbiology, Clinical findings, Imaging • Treatment of Osteomyelitis. • Types of Osteomyelitis. • Osteoradionecrosis & Bisphosphonate induced osteonecrosis of the jaw. 	3	6
<p><u>Pre-Prosthetic Surgery:</u></p> <ul style="list-style-type: none"> • Objectives of pre-prosthetic surgery • Classification of edentulous ridge. • Alveoloplasty, reduction of maxillary tuberosity, bony irregularities- including: tori, alveolar ridge abnormalities, bony exostosis, the genial tubercles reduction and the mylohyoid ridge reduction • Soft tissue abnormalities: Fibrous flabby ridges, fibrous tuberosity, labial & lingual frenectomy, denture irritation-hyperplasia • Sulcus deepening procedures included vestibuloplasty techniques. 	1	2
<p><u>Dental implant:</u></p> <ul style="list-style-type: none"> • Osseointegration concept and biology of bone repair. • Types and designs of dental implant. • Advances in implant surface design and its effect on the healing process. • Implant components. • Preoperative medical evaluation of the implant patient, Indications & Contraindications. • Evaluation of implant site, bone height, width, length, and anatomical limitations • The principles and surgical approaches for dental implant (stage I, and stage II surgery) • Complications of surgical phase. • Different Surgical & Loading Protocols. 	1	2

<p>Bone Graft:</p> <ul style="list-style-type: none"> • Adjunct surgical procedures with dental implant. (Onlay graft, sinus floor elevation) • Types of bone graft, biology, and surgical procedures to harvest bone graft (Donor, Recipient site). • Key factors for successful bone grafting. 	1	2
<p>Maxillofacial Trauma:</p> <ul style="list-style-type: none"> • Etiology of maxillofacial trauma. • The role of the history: Including cause, timing of presentation, state at presentation, and loss of consciousness. • Principles of management of trauma patients (ABCs) • Fracture Mandible: Classification, signs, symptoms, radiographic presentation, Different treatment options. • Midface fracture: Classification, signs, symptoms, and radiographic presentation. • Pediatric & geriatric trauma: Differences in management between adult & children. 	2 1/2	5
<p>Medico-legal ethics:</p> <ul style="list-style-type: none"> • Consenting the patient for surgery • Value of proper documentation • Medical litigation in Saudi Arabia 	1	2

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	28			28		
Credit	2			2		

3. Additional private study/learning hours expected for students per week. **4 hours/week**

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Discuss the basic surgical principles including different flap designs, techniques of bone removal, and different suture materials.	<ul style="list-style-type: none"> • Lecture • Small group discussion of case scenarios • Self-study through E-learning environment (Blackboard) • Assignments 	<ul style="list-style-type: none"> • MCQs • Modified essay questions • Short answer Questions • Assignments
1.2	Discuss the Dento-alveolar complications.		
1.3	Discuss the aetiology, signs & symptoms of maxillary sinusitis.		
1.4	Discuss the different causes, and management of oro-antral communication.		
1.5	Discuss the principles of treatment of acute and chronic oral and maxillofacial infection.		
1.6	Describe the different surgical procedures required to improve the retention of dentures.		
1.7	Define osseointegration.		
1.8	Explain the bone repair mechanism following osteotomy.		
1.9	Describe different types of bone graft, and adjunct surgical procedures with dental implant.		
1.10	Describe different types of maxillofacial fractures.		
1.11	Discuss signs, symptoms and management of patients with maxillofacial injuries.		

2.0	Cognitive Skills		
2.1	Analyse clinical, and radiographic pictures for patients with impacted teeth.		
2.2	Identify the hazards, and assess the risk associated with surgical removal of impacted teeth.		
2.3	Formulate a treatment plan for patients with impacted teeth.		
2.4	Identify patients with signs of maxillary sinusitis, and formulate a treatment plan.		
2.5	Analyse the clinical and radiographic images to reach differential diagnosis for cystic lesions.		
2.6	Recognize patients with signs and symptoms of orofacial infection.		
2.7	Evaluate the severity of orofacial infection and the need of immediate intervention.		
2.8	Apply the principles of management of oro-facial infection.		
2.9	Classify different types of maxillofacial fractures.		
2.10	Recognize patients with signs and symptoms of facial fractures.		
2.11	Interpret different radiographic pictures with mandibular fractures.		
2.12	Propose treatment options for the management of patients with maxillofacial injuries.		
2.13	Recognize the need for and request the relevant clinical laboratory and diagnostic tests when appropriate.		
2.14	Prescribe appropriate pharmacological agents correctly		
		<ul style="list-style-type: none"> • Lecture • Small group discussion of case scenarios • Self-study through E-learning environment (Blackboard) • Assignments 	<ul style="list-style-type: none"> • MCQs • Modified essay questions • Short answer Questions • Assignments

	(when required) before or after minor oral surgical procedure.		
3.0	Interpersonal Skills & Responsibility		
3.1	Demonstrate, and apply the principles of professional behaviour including honesty, confidentiality, and respect in a clinical practice.	<ul style="list-style-type: none"> • Demonstration, and chair side discussion • Role model • Supervised practice and feedback 	<ul style="list-style-type: none"> • Structured Clinical Operative Test (SCOT) using a global rating scale.
3.2	The student must develop a compassionate, kind and caring attitude towards patients.		
3.3	Apply clinic safety policies and procedures.		
3.4	Take responsibility for appropriate handling of equipment and instruments in the clinic.		
4.0	Communication, Information Technology, Numerical		
4.1	Demonstrate an ability to communicate with all members of the clinical team & peers in an appropriate manner, which inspires confidence, motivation, and teamwork.	<ul style="list-style-type: none"> • Demonstration, and chair side discussion • Role model • Supervised practice and feedback 	<ul style="list-style-type: none"> • Structured Clinical Operative Test (SCOT) using a global rating scale.
4.2	Display competency in preparing and obtaining a valid informed consent for the proposed treatment from the patient/ Parent/ guardian as appropriate.	<ul style="list-style-type: none"> • Demonstration, and chair side discussion • Role model • Supervised practice and feedback 	<ul style="list-style-type: none"> • Structured Clinical Operative Test (SCOT) using a global rating scale.
4.3	Discuss, and present professional knowledge effectively verbally, and in writing to professional individuals including staff members.	<ul style="list-style-type: none"> • Demonstration, and chair side discussion • Role model • Supervised practice and feedback 	<ul style="list-style-type: none"> • Structured Clinical Operative Test (SCOT) using a global rating scale.
4.4	Write referring letters to other doctors.	<ul style="list-style-type: none"> • Demonstration and discussion 	<ul style="list-style-type: none"> • Assignments
4.5	Use information and communication technology to complete assigned tasks.	<ul style="list-style-type: none"> • Assignments 	<ul style="list-style-type: none"> • Assignments

5.0	Psychomotor		
5.1	Perform a basic clinical examination, including blood pressure, pulse, respiration, and temperature.	<ul style="list-style-type: none"> • Demonstrations. • Supervised practice on patients with feedback using a global rating scale. 	<ul style="list-style-type: none"> • Structured Clinical Operative Test (SCOT) using a global rating scale.
5.2	Select and use the proper instruments in different surgical procedures.	<ul style="list-style-type: none"> • Demonstrations. • Supervised practice on patients with feedback using a global rating scale. • E-learning Assignments 	<ul style="list-style-type: none"> • Structured Clinical Operative Test (SCOT) using a global rating scale. • OSCE
5.3	Perform different local anaesthetic techniques to ensure pain-controlled treatment of patients. (@)	<ul style="list-style-type: none"> • Demonstrations. • Supervised practice on patients with feedback using a global rating scale. • Self practice on simulation models with feedback. 	<ul style="list-style-type: none"> • Structured Clinical Operative Test (SCOT) using a global rating scale.
5.4	Perform extraction of erupted teeth. (@)	<ul style="list-style-type: none"> • Demonstrations. • Supervised practice on patients with feedback using a global rating scale. • Self practice on simulation models with feedback. 	<ul style="list-style-type: none"> • Structured Clinical Operative Test (SCOT) using a global rating scale.
5.5	Perform extraction of buried roots whether fractured during extraction or retained root fragment. (@)	<ul style="list-style-type: none"> • Demonstrations. • Supervised practice on patients with feedback using a global rating scale. 	<ul style="list-style-type: none"> • Structured Clinical Operative Test (SCOT) using a global rating scale.
5.6	Perform the common suturing techniques on simulation models.	<ul style="list-style-type: none"> • Demonstrations. • Self practice on simulation models with feedback. 	<ul style="list-style-type: none"> • OSCE
5.7	Record, and save patient notes, and records.	<ul style="list-style-type: none"> • Demonstrations. • Supervised practice with feedback using a global rating scale. 	<ul style="list-style-type: none"> • Structured Clinical Operative Test (SCOT) using a global rating scale.

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First Exam	5	10%
2	Mid term Exam	10	10%
3	Assignments & Quizzes on Blackboard	7 & 12	10%
4	Continuous clinical	Every week	30%
5	Final clinical	15	20%
6	Final written	16	20%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (Include amount of time teaching staff are expected to be available each week)

- All the staff members are available, and reachable in their office, and in the clinical sessions.
- The office hours 4 hours /week, which is divided in to two sessions.
- The discussion board in the blackboard, and the university email system are formal ways that are available for students to communicate with the course director.

E. Learning Resources

1. Required Text(s): <ul style="list-style-type: none">• Peterson L, Ellis E, Hupp, J and Tucker, M. Contemporary Oral And Maxillofacial Surgery Mosby, C.V.Co.Ltd, 5th Edition 2008.• Malamed, Handbook of Local Anaesthesia. Mosby, c.v. co. ltd, 5th Edition, 2002.
2. Essential References
3- Recommended Books and Reference Material (Journals, Reports, etc) (Attach List) <ul style="list-style-type: none">• Contemporary Implant dentistry by Carl E. Mish, 2008.• Bone biology, Harvesting, Grafting for dental Implant by Arun k Crag, 2004.• Oral and maxillofacial Pathology. A Rational for Diagnosis and Treatment by Robert E. Marx 2003.• The Maxillary Sinus and Its Dental Implications by David A McGowan, 1993.• Master Dentistry Volume 1. Coultland, Horner, Sloan, Theaker. Churchill Livingstone. 2nd edition 2008.• Oral and Maxillofacial infections. 4th edition. Topazian, Goldberg, Hupp. 2002
4-Electronic Materials, Web Sites etc <ul style="list-style-type: none">• E-learning course on the blackboard. (University of Dammam Website) http://vle.ud.edu.sa/webapps/login/?action=login
5- Other learning material such as computer-based programs/CD, professional standards/regulations <ul style="list-style-type: none">• Virtual patient program on the blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (ie number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Lecture rooms, laboratories, etc.) <ul style="list-style-type: none">• Lecture room to accommodate 30 -35 students preferably the seats to be arranged U-shape or multiple round tables.• Oral surgery simulation lab with bench-mounted simulation models (30-35 phantom heads)• Computer and Internet access in the classroom.
2. Computing resources <ul style="list-style-type: none">• 30-35 computers.
3. Other resources (specify --eg. If specific laboratory equipment is required, list requirements or attach list) <ul style="list-style-type: none">• Basic surgical instruments, and equipment such as dental forceps, and elevators

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<ul style="list-style-type: none">• Students' survey that is conducted by the College Quality Unit.
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department
<ul style="list-style-type: none">• Peer evaluations
3 Processes for Improvement of Teaching
<ul style="list-style-type: none">• All staff members are participating in the staff development program that is conducted either by the College of Dentistry or the Medical Education Unit, University of Dammam.• Orientation sessions for newly attached staff members by a senior faculty member.
4. Processes for Verifying Standards of Student Achievement (eg. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)
<ul style="list-style-type: none">• Calibration session between all faculty members teaching the course
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.
<ul style="list-style-type: none">• Course report reflects on both the course outcome in term of students' performance, and the process in term of the difficulties that faced the course implementation.• Plans are put for improvement considering students' survey and their opinions in the feedback sessions.

Faculty or Teaching Staff: Hesham Marei

Signature: Hesham Marei Date Report Completed: 01/09/2014

Received by: _____ Dean/Department Head

Signature: _____ Date: _____