



# STUDY GUIDE

## DEPARTMENT OF ORAL SURGERY



Prof. Dr. Zahur Qayyum  
WOMEN DENTAL COLLEGE

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# STUDY GUIDE

## FINAL YEAR BDS

### ORAL SURGERY DEPARTMENT

#### Description:

#### Overview:

Program	Bachelor of Dentistry
Course Name	Final year BDS-Oral Surgery
Contact Hours	Clinicals:260 Lectures:90
Infrastructure Requirements	Lecture Hall Clinical Ward

#### Faculty Responsible for Course Conduction:

Sr. No	Faculty	Designation
1.	Prof. Dr. Zahur Qayyum	Head of department
2.	Dr. Akif Mehmud	Associate Professor
3.	Dr. Maria Iftikhar Khan	Lecturer
4.	Dr. Syed Haris Ali Shah	Lecturer

#### Details Of Supporting Staff:

Sr. No	Staff	Designation
1.	Dr. Qandeel Bashir	TMO

#### Details Of Other Supporting Staff:

Sr. No	Staff	Designation
1.	Sohail Ahmed	DSA
2.	Ramish khan	DSA
3.	Tahira Khatoon	DSA

**CURRICULUM OBJECTIVES AND TEACHING STRATEGY**  
**ORAL SURGERY**  
**FINAL YEAR BDS**

**COURSE TOPIC: Basic Principals of Oral Surgery**

S. No	Lecture Topic	Intended learning outcomes (ILOs)	Mode of Teaching		Assessment
			Lectures hrs	Clinical hrs	
1	Introduction History. Diagnosis and treatment planning	Discuss a Developing surgical diagnosis Explain Basic necessities for surgery Define & follow Aseptic technique Discuss Communicable Pathogenic organisms o Bacteria o Viral organisms o Mycobacterial organism	2	5	Any one form of assessment Quiz Class Test Class Participation Individual Assignment Group Test
	Sterilization. (instruments and armamentarium)	Discuss o Aseptic techniques & universal precautions o Techniques of instrument sterilization o Techniques of instrument disinfection o Maintenance of sterility Operating disinfection o Surgical staff Preparation o Post surgical Asepsis	2	8	
	Incision. Flap design and tissue handling	Describe Incisions Describe Flap design o Prevention of flap necrosis o Prevention of flap dehiscence o Prevention of flap tearing	2	6	
	Haemostasis management and suturing	Describe Tissue handling Describe Hemostasis of promoting wound hemostasis Dead space management	1	4	

<p>Post operative care, nutrition, prevention of infection</p>	<p>Describe Decontamination &amp; debridement  Describe Edema control  Discus Patient general health &amp; nutrition</p>	<p>1</p>	<p>4</p>	<p>2</p>
<p>Wound healing (soft tissue and hard tissue)</p>	<p>Describe Wound repair  Causes of tissue damage  ○ Epithelialization  Stages of Wound healing  Discus Surgical Significance of Wound  Healing concepts  Define Facial Neuropathy of traumatic origin  List the classifications of Nerve Injury  Discuss Nerve healing</p>	<p>2</p>	<p>8</p>	

**COURSE TOPIC: Medical Aspects of Oral Surgery**

<b>S. No</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
			<b>Lectures Hrs</b>	<b>Clinicals Hrs</b>	
2	Prevention and Management of Medical Emergencies	Discuss Medical History. Explain Physical Examination. Identify situation which can exaggerate the pre existing Medical condition Enlist appropriate preventive measure before treatment	3	5	Any one form of assessment - Quiz - Class Test - Class Participation - Individual Assignment - Group Test
	Management of Medically compromised patient	Diagnose Dental problems in Medically compromise patient Collect informed /Written consent Discuss Management of Patient with Compromising Medical Condition. Enlist prescribed Medication for pregnant & postpartum patients after treatment.	3	5	

**COURSE TOPIC: Anesthesia & Sedation**

<b>S. No</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
3	Introduction, types (local, general & sedative anesthesia)	Classify Anesthesia Describe different type of Anesthetic solution used in dentistry	2	4	Any one form of assessment Quiz Class Test - Class Participation Individual Assignment Group Test
	Preoperative assessment (for local & General anesthesia)	.Interpret investigation for GA fitness Select patient for GA Describe Mechanism of LA	2	5	
	Indication and contraindication of (LA & GA).	1. Discuss indication & contraindication of Anesthesia	2	4	
	Administration and technique (complication)	1. Explain conventional & specialized technique of LA	2	6	

<b>S. No</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
4	Clinical and radiographic evaluation of teeth for removal	Discuss pain & Anxiety control Discuss Presurgical Medical Assessment Discuss Clinical evaluation of teeth for removal Discuss Radiographic examination of tooth for removal Describe patient & surgeons preparation	2	8	Any one form of assessment Quiz Class Test - Class Participation Individual
	Principles of use of instruments	Describe instruments for incising tissue Describe instruments for elevating mucoperiosteum Describe instrument for retracting soft tissue Describe instruments for controlling hemorrhage Describe instruments for grasping tissue Describe instruments for removing bone Describe instruments for removing soft tissue from bony defects Describe instruments for suturing mucosa Describe instruments for holding mouth open Describe instruments for providing suction Describe instruments for holding towel & drapes in position Describe instruments for irrigation	2	10	Assignment Group Test



		Describe Dental elevators Describe extraction forceps Discuss instrument tray system			
	Non surgical extraction.	List the Indications for removal of teeth List Contraindications for the removal of teeth Explain Chair position for Forceps extraction Explain mechanical principles involved in tooth extractions Explain principles of forceps use Describe procedure for closed extraction Discuss specific techniques for removal of each tooth Describe post extraction care of tooth socket	2	8	
	Surgical extraction.	Discuss principles of flap design, development and management Design parameters for soft tissue flaps Types of mucoperiosteal flaps Principles of suturing Explain Principles and techniques for surgical extraction Enlist Indications for surgical extraction Technique for open extraction of single- rooted tooth Explain Technique for surgical removal of multirrooted teeth Removal of small root fragments and root tips	2	8	

		<p>v) Policy for leaving root fragments.</p> <p>Discuss Multiple extractions</p> <p>Treatment planning</p> <p>Extraction sequencing</p> <p>Technique for multiple extractions</p>			
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**COURSE TOPIC: Impacted Teeth**

<b>S. No</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
5	Definition, Assessment & evaluation of impacted teeth	Define Impaction List the indications & contraindications for removal of impacted teeth Explain the Classification system of impacted teeth	2	4	Any one form of assessment Quiz Class Test - Class Participation Individual Assignment Group Test
	Indication contraindication & type of impaction	Describe Root Morphology Discuss Modifications of Classification system for maxillary impacted teeth. Discuss the difficulty of removal of other impacted teeth	1	4	
	Techniques of removal &	Describe surgical procedures Discuss preoperative patient management	2	3	
	Post-operative management and complications	Describe control of postoperative bleeding Describe control of postoperative pain and discomfort Discuss postoperative follow up visit Describe operative notes for the records Describe prevention of complication Explain soft tissue injuries Discuss complications with the tooth being extracted Discuss injuries to the adjacent teeth Discuss injuries to osseous structures Discuss injuries to adjacent structures Describe oroantral communications Describe post operative bleeding Describe delayed healing and infection Describe fractures of the mandible	3	6	

**COURSE TOPIC: Infections**

<b>S. No</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
6	Acute infection Chronic	Explain microbiology of odontogenic infections Classify spaces of infection Explain Fascial space infections Explain mandibular spaces Explain osteomyelitis Explain actinomycosis Explain candidosis	3	5	Any one form of assessment Quiz Class Test - Class Participation Individual Assignment Group Test
	Spread of infection.	Discuss natural history of progression of odontogenic infections	1	4	
	Principles of management of infection	Explain principles of therapy of odontogenic infections Explain principles of prevention of infection Explain principles of prophylaxis of wound infection Explain principles of prophylaxis against metastatic infection	2	5	

**COURSE TOPIC:                   Cysts**

<b>S. No</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
7	Diagnosis and management of cyst	Discuss Basic surgical goals Describe Surgical management of cysts and cyst like lesions of the jaws.	1	5	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment - Group Test

**COURSE TOPIC: Odontogenic tumour**

<b>S. No</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
8	Diagnosis and management	Identify Odontogenic tumors Describe Surgical Management of benign lesions in oral soft tissues Discuss Principles of surgical management of jaw tumors	2	5	Any one form of assessment Quiz Class Test - Class Participation Individual Assignment Group Test
	Resection	Enlist type of resections & their indications in the jaw tumor Explain Reconstruction of jaws after removal of oral tumors	2	5	

**COURSE TOPIC: Malignant Orofacial tumours**

<b>S. No</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
9	Clinical features. Investigation & diagnosis of cancer.	Discuss Principles of surgical management of jaw tumors	1	4	Any one form of assessment Quiz Class Test - Class Participation Individual Assignment Group Test
	Principles of differential diagnosis & Biopsy.	Discuss examination and diagnostic methods Discuss Principles of biopsy Describe soft tissue biopsy technique and surgical principles Describe intraosseous or hard tissue biopsy technique and surgical principles Discuss referral for biopsies	2	4	
	Management (surgery, radiotherapy & chemotherapy)	Describe dental management of patients undergoing radiotherapy to head and neck Describe dental management of patients on systemic chemotherapy for malignant disease.	2	4	
	Reconstruction principles	Classify the Mucosal Flaps use for reconstruction Describe basic reconstructive principles	2	4	

**COURSE TOPIC: Salivary gland disease**

<b>S. N o</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
10	Salivary gland infection, obstructive disease & tumors.	Discuss Embryology, Anatomy and Physiology Discuss Diagnostic Modalities Describe obstructive salivary gland disease	1	4	Any one form of assessment Quiz Class Test - Class Participation Individual Assignment Group Test
	Clinical features, investigation & management of salivary gland disorders.	Discuss Mucous retention and extravasation phenomenon Describe salivary gland infections Describe Necrotizing sialometaplasia Describe sjogren's syndrome Discuss traumatic salivary gland injuries Describe salivary gland disorders	2	5	



**COURSE TOPIC:                    TMJ disorders**

<b>S. N o</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
11	Classification of TMJ disorders.	1. Discuss Evaluation 2. List classification of temporomandibular disorders	1	5	Any one form of assessment Quiz Class Test - Class Participation Individual Assignment Group Test
	Clinical features, investigation & treatment modalities.	Identify sign & symptoms Prescribed relevant investigation Discuss different treatment options 4. Explain permanent occlusion modification 5. Explain temporomandibular joint surgery 6. Advised follow up	2	6	

**COURSE TOPIC: Pre-Prosthetic Surgery**

<b>S. N o</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
12	Correction of soft & hard tissue abnormalities	Explain objectives of preprosthetic surgery Discuss principles of patient evaluation and treatment planning Describe recountouring the alveolar ridges Describe tori removal Describe soft tissue abnormalities Define immediate dentures Describe overdenture surgery Explain mandibular augmentation Explain maxillary augmentation Describe soft tissue surgery for ridge extension of the mandible Describe soft tissue surgery for maxillary ridge extention Explain correction of abnormal ridge relationships	2	12	Any one form of assessment Quiz Class Test - Class Participation Individual Assignment Group Test
	Dental implants	Discuss Biologic considerations for osseointegration List clinical implant components Discuss implant prosthetic options Discuss preoperative medical evaluation of implant patient Describe surgical phase: treatment planning Explain basic surgical techniques Discuss complications Describe advanced surgical techniques Discuss special situations	2	12	

**COURSE TOPIC: Facial pain**

<b>S. No</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
13	Diagnosis and management of Orofacial pain	1. Discuss Basics of pain neurophysiology List classification of orofacial pains Discuss neuropathic facial pains Describe Chronic headache Discuss other Chronic head pains of dental interest Discuss Evaluation of the orofacial pain patients	2	4	Any one form of assessment Quiz Class Test - Class Participation Individual Assignment - Group Test
	Clinical evaluation and management of trigeminal neuralgia.	1. Describe sign & symptoms 2. Take complete history 3. Discuss management option	1	4	

**COURSE TOPIC: Oro- facial neuropathies**

<b>S . N o</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
1 4	Diagnosis and management of facial palsy.	1. Identify causes of facial nerve pathology 2. Discuss management for facial palsy	1	3	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment - Group Test

**COURSE TOPIC: Cleftlip and palate**

<b>S . N o</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs )</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
1 5	Management of cleft lip and palate patients	1. Describe embryology Discuss causative factors Discuss problems of the cleft afflicted individual Explain treatment of cleft lip and palate Describe dental needs of cleft afflicted individuals	1	4	Any one form of assessment Quiz Class Test - Class Participation - Individual - Assignment - Group Test

**COURSE TOPIC: Orthognathic surgery.**

<b>S . N o</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
1 6	Objectives & principles of management of Orthognathic surgery.	1. Classify orthognathic procedure 2. Evaluate patient for Orthognathic surgery 3. Enlist the procedure to correct jaw abnormality	1	4	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment - Group Test

**COURSE TOPIC: Surgical Endodontics**

<b>S . N o</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
17	Indication and technique (surgical Endodontics)	1. Describe drainage of an abscess Define Periapical surgery Define Corrective surgery Describe Healing Discuss recall Discuss adjuncts Discuss when to consider referral	2	6	Any one form of assessment Quiz Class Test - Class Participation Individual Assignment - Group Test

**COURSE TOPIC: Maxillofacial trauma**

<b>S . N o</b>	<b>Lecture Topic</b>	<b>Intended learning outcomes (ILOs)</b>	<b>Mode of Teaching</b>		<b>Assessment</b>
1 8	BLS and ATLS.	Discuss evaluation of patients with facial trauma Describe & Demonstrate BLS & ATLS Knows ABCDE	2	5	Any one form of assessment Quiz Class Test - Class Participation Individual Assignment Group Test
	Traumatic injuries of teeth Management of soft tissue injuries.	Describe soft tissue injuries Describe dentoalveolar injuries	3	3	
	Management of mandibular fractures	Discuss causes, classification ,sign & symptoms & Management of mandibular fractures Identify complication of mandibular fracture	3	5	
	Clinical features, investigation & manage of ZMC	Discuss causes, classification ,sign & symptoms & Management of ZMC fractures Prescribed appropriate radiograph Identify complication of ZMC fracture	2	6	
	Nasal & Orbital fractures.	Describe anatomy of orbit Discuss causes, classification ,sign & symptoms & Management of Orbital & Nasal fractures Identify complication of Orbital & Nasal fracture	2	6	
	Mid face fracture.	Discuss causes, classification ,sign & symptoms & Management of midface fractures Identify complication of midface fracture	2	6	

<b>TOTAL</b>	<b>90 Lecturers</b>	<b>260 clinicals</b>
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## Learning Resources:

- Contemporary Oral and Maxillofacial Surgery  
by James R. Hupp, Edward Ellis III, Myron R. Tucker **7<sup>th</sup> Edition**

### Additional Learning Resources:

Hands on	Demonstrations
Videos	YouTube

### Assessment Methods:

#### MCQs:

Multiple Choice questions; Single best Type

**OSPE/OSCE:** Objective Structured Practical/Clinical examination

#### Presentation:

#### Multiple Choice Questions:

- Single best type MCQs having five options with one correct answer and four distractors are part of assessment.
- Correct answer carries one mark, and incorrect will be marked zero. Rule of negative marking is not applicable.
- Students mark their responses on specified computer-based designed sheet.

### Objective Structured Practical/Clinical Examination

- Nine OSCE stations are used for formative as well as summative assessment.
- Time allocated for each station is five minutes as per Examination rules of Khyber Medical University, Peshawar.
- All students are rotated through the same stations.
- Stations used are unobserved, observed, interactive and rest stations.
- On unobserved stations radiographs, flowcharts, case scenarios may be used to assess cognitive domain.
- On observed station, examiners don't interact with candidate and just observe the performance of skills /procedures.
- On interactive station, examiner ask questions related to the task within the allocated time.
- On rest station, students are not given any task. They just wait to move to the next station.

**Presentation:**

Students are given topics for presentation either individually or in groups. They are encouraged to prepare presentations on power point to enhance their understanding of the topic.

**Internal Assessment Criteria:**

1. 10% weightage of Internal Assessment in professional exam is policy of Khyber Medical University.
2. This Internal Assessment will comprise of following components.
  - a) Attendance
  - b) Class presentations
  - c) Monthly tests
  - d) Midterms
  - e) Pre-Prof

**Examination Rules & Regulations:**

1. One class test of the subject may be held monthly, marks of which will be included in internal assessment. Marks for class test can vary according to syllabus and teachers' choice.
2. Mid-Term exam comprising 45 MCQs of single best type and 45 marks SEQs will be held in the middle of the session.
3. Pre-prof Exam comprising 45 MCQs of single best type and 45 marks SEQs will be conducted at the end of session before prep leaves.
4. The pattern of class tests, Mid-term & Pre-prof will be same as the Professional Exam taken by Khyber Medical University, Peshawar.
5. OSPEs will be conducted at the end of Mid-term & pre-prof Exam.

## Model Questions:

### Multiple Choice Question

**Question:** While Extracting a mandibular 3<sup>rd</sup> molar, it is noted that the distal root is missing. The root tip is likely in the

- a. Submental Space
- b. Submandibular Space
- c. Para pharyngeal space
- d. Pterygomandibular Space
- e. Infratemporal Space

**Correct option is B.**

**Reference:** Contemporary Oral & Maxillofacial Surgery by James R. Hupp, Edward Ellis III, Myron R. Tucker- 7<sup>th</sup> Edition

### Short Answer Question:

**Question:** The first step in the management of head injury

- a. Secure Airway
- b. IV mannitol
- c. IV Dexamethasone
- d. Blood transfusion
- e. Monitor Vitals

**Answer:** a) Secure Airway

**Reference:** Contemporary Oral & Maxillofacial Surgery by James R. Hupp, Edward Ellis III, Myron R. Tucker- 7<sup>th</sup> Edition

**Suggestions For Next Academic Year:**

- Students should be encouraged to read latest topics from list provided by American Board of Orthodontics.
- Article writing should be encouraged for students.
- Sessions of career counselling should be arranged for students.
- Students should be encouraged to attend workshops, to participate in different poster competitions at different forums.