

## Jinnah Medical & Dental College

## **ENT**

## **Study Guide**



Otorhinolaryngology

MBBS 2021-22 He who has health, has hope
And he who has hope,
has everything!

# Team Members of the Study guide 2021

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## Introduction

A very warm welcome to medical students in the Otolaryngology posting. Otolaryngology is the oldest medical specialty in the world. The study of otolaryngology has expanded over the past 50 years and now focuses on head and neck. The diseases of Ear, nose and throat had been one of the leading challenges for health care administration and providers in underdeveloped countries like Pakistan. Proper treatment in time may let a person to lead quality life without social embarrassment and economic loses.

This clinical rotation has been developed to impart integrated teaching as a part of curriculum in Jinnah Medical and Dental College, Karachi. It will be covered in 4 weeks. This clinical posting has been designed to introduce new entrants to the MBBS program basic concepts essential for understanding a number of topics in Otorhinolaryngology, so that they are able to apply it when they come across more advanced topics. This clinical posting hence provides a framework within which learners are expected to build future competencies.

#### Rationale

Before moving on to complex clinical issues, it becomes imperative for the students to achieve clear concepts of the basic organization of Ear, nose and throat. This posting is designed to cover the detailed examination of the ear, nose and throat, providing patient centered approach or diagnosis and management of common clinical presentations. Concepts acquired during this clinical posting will be revisited in all other subsequent postings of the undergraduate course.

#### **General Learning Objectives**

At the end of the Otolaryngology clinical rotation, students will be able to:

- 1. Take a detailed history for each of the presenting clinical scenario.
- 2. Perform detailed Ear Nose Throat and Neck examination.
- 3. Provide safe and patient-centered approach for the diagnosis of the common clinical presentations by using critical reasoning skills on the basis of:
  - Relevant basic and clinical science knowledge
  - Evidence-based medicine (EBM)
- 4. Demonstrate knowledge regarding Surgical and Applied anatomy of Ear Nose Throat and Neck.
- 5. Demonstrate truthfulness with patients, peers, and in professional work (e.g., documentation, communication, presentations, research, taking patient consent etc).
- 6. Demonstrate accountability to patients as well as colleagues and accepts responsibility for errors.
- 7. Works cooperatively and communicates effectively to achieve common patient care and educational goals of all involved health care providers.
- 8. Counseling of patients regarding disease, management and prognosis



## JMDC CURRICULUM FRAMEWORK: MBBS 1-5 YEARS

Year	Module 1	E O M	Module 2		E O M	Modul	le 3	E O M	Module 4	E O M	Module 5		E O M	Module 6	E	OM	
1	Foundation-1 8 weeks		Blood-1 4 weeks			Locom 8 week			Respiratory-1 4 weeks		CVS-1 4 weeks			GIT-1 4 weeks			
2	Module 7	E O M	Module 8		E O M	Modul	le 9	E O M	Module 10	E O M	Module 11		E O M	Module 12	E	OM	
	Head & Neck-1 5 weeks		Neuroscience 7 weeks	es-1		Specia 3 week	l Senses		Endocrine-1 5 weeks		Reproductive-1 4weeks			Urinary-1 5weeks			
3	Module 13	E O M	Module14		E O M	Modul	le15	E O M	Module16	E O M	Module17		E O M	Module 18	E	OM	
	Foundation 2 10 weeks		Blood-2 5 weeks			Locom 4 week			Respiratory-2 4 weeks		CVS-2 5 weeks			GIT-2 7 weeks			I i
						Cli	nical R	otati	ons (Each B	atcl	1)				,		8
R 1	Medicine		Psychiatry	S	urgery		Surgery		OBS/ GYN		Pediatrics		Eye			Ent	- 1
	2 weeks	W	2weeks		weeks		2 weeks		2 weeks		2 weeks			eeks		2week	S I
R 2	Medicine 2 weeks	'	Psychiatry 2weks	S	urgery weeks		Orth 2weeks		OBS/ GYN 2 weeks	_	Pediatrics 2 weeks		Ey 2 w	re eeks		Ent 2week	5
4	Module 19	E O M	Module 20		E O M	Modul	le 21	E O M	Module 22	E O M	Module 23		E O M	Module 24	E O M	Lectui	·es
	Orthopedics 7 weeks		Reproductive 7 weeks	e-2		Neuroso 9 week	cience-2		Genetics 2weeks		Dermatology 2 weeks			Rehabilitation 2 weeks		Ent	Eye
		<u> </u>				С	linical	Rota	ations (Each	Bat	ch)						
R 1	Medicine 3 weeks	W T	Psychiatry 3 weeks	W 3	urgery weeks	V T		W	OBS/ GYN 3 weeks	W	Pediatrics 3 weeks	W T	Eye 3 w	eeks W T		nt eeks	W
R 2	Medicine 3weeks		W		urgery weeks		W		Eye 3weeks			W T		Ent 3weeks			W
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**EOM**=Exam of Module

R= Rotation

WT = Ward Test

## Otorhinolaryngology

### Clinical Rotation

#### MAIN CONTENT AREAS

#### Ear

- Acute otitis externa, management of impacted wax and foreign body
- Management plan for dealing with trauma to pinna and traumatic rupture of tympanic membrane
- Etiology, investigations, treatment, and complications for Malignant otitis
- Myringitis bullosa, Perichondritis and Fungal infections
- Clinical presentations, examination findings, investigations, and treatment
- · Acute otitis media, Serous otitis media, Chronic otitis media mastoiditis
- Causes of deafness investigation findings related to deafness and mutism in a child
- Tinnitus & Acoustic Neuroma
- Vestibular neuritis, benign paroxysmal positional vertigo, Meniere's Disease, and migraine-associated vertigo

#### Nose

- Fractures of the external nose based on history, clinical findings and investigation findings and management plan for dealing with trauma to external nose
- Congenital lesions and deformities of external nose
- Diagnosis and management of epistaxis, Deviated nasal septum, Hematoma, septal abscess, and perforation
- Etiology, pathophysiology, clinical presentations, investigations and treatment plans for Allergic Rhinitis and rhinitis due to foreign bodies
- Polyps, foreign bodies, and maggots in nose
- Sinusitis, tumors, and headaches

#### **Throat**

Diseases of salivary gland, thyroid gland, and lymph nodes

- Diagnose of Thyroglossal cyst/ sinus, Pre-auricular cyst/sinus, Branchial Cyst and Branchial Fistula
- Diagnosis, investigations, differential diagnosis, and treatment plans for oral cavity
- Tonsillitis, Peri-tonsillitis and abscess etiology, pathophysiology, differential diagnosis, and investigations for dysphagia
- Etiology and pathophysiology of supraglottitis, laryngitis and laryngeal tumors

## Competencies assessed in this module

**K**=Knowledge

S=Skill

**A**=Attitude

#### **Teaching / Learning Methods**

The teaching learning sessions of this module will be of diverse types:

- a. Large group interactive sessions (LGIS)
- b. Small group teaching will include tutorials and, case based learning session.
- c. Problem based learning sessions.
- d. Practical session will comprise sessions on early exposure to clinical methods and practical laboratory demonstrations.
- e. Seminars: on different topics, in which students will make oral presentations on different aspects of the allocated topic.
- f. Self-directed learning sessions: This is the time during which students are expected to revise what they have learnt in the class, clear their concepts by consulting different textbooks, reference material and prepare their assignments and projects.

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**Students Assessment** 

There will be an end of rotation ward test after completion of clinical posting which will

comprise the following components: -

i. Written Assessment

The theory paper will have components of one – best type multiple – choice questions

(MCQs).

ii. Practical / lab examination:

This will comprise Objective Structured Clinical Examination (OSCE) The OSCE will have

both observed and non-observed stations. The end of clinical posting will be of 2 hours

duration. This will comprise the following components:

The OSPE/ OSCE will be conducted in batches. The students will be having different

patterns of OSPE/OSCE in the subjects of otolaryngology.

Summary of marks of each module exam

Theory (BCQs) = 100 marks

OSPE (10 stations) = 100 marks

Total = 200 marks

#### **Internal Assessment:**

- Continuous monitoring of attendance and practical assessment in short groups By Mini
   CEX and logbooks.
- It may be in the form of MCQs (BCQs), Ward tests, and OSCE.
- Internal assessment carries 20% weightage

#### Course Evaluation:

Course evaluation will be obtained through a feedback form which will be posted on the JMC website

#### **Mandatory Policy:**

#### Eligibility for sitting in Professional Examinations is as follows:

- 75% overall Class Attendance
- 75% Attendance all Clinical Wards with passing marks in all Clinical Ward Tests.
- Minimum 40% aggregate marks on all Internal Examinations (Module Tests, Midterm, Pre-Professional Examinations)
- MBBS 1<sup>st</sup>Year: Complete all Professional Communication assignments with passing marks
- MBBS 1<sup>st</sup>& 2<sup>nd</sup>Year: Obtain passing marks in Behavioral Sciences & Research Module assessments
- MBBS 2<sup>nd</sup>Year: Presentation in Journal club at least twice in a year
- MBBS 4<sup>th</sup>& Final Year: CPC Presentation at least once in a year
- Skills Labs: Must be completed with passing marks
- Research Paper must be completed before MBBS 4 Professional Examination

#### Failure to Meet the Eligibility Requirements:

- A Student failing to meet the above listed eligibility for sitting in the professional examination will NOT be allowed to sit in 1<sup>st</sup> attempt of the Professional Examination.
  - The college has the right to withhold all students who however, not met the eligibility requirements from sitting in the 1<sup>st</sup> attempt.
- Such students who have been withheld from sitting in the 1<sup>st</sup> attempt of the Professional exam because of failure to meet the eligibility requirements will be allowed only to sit in the retake of that examination.
  - It is expected that deficiency in requirements of Professional communication assignments, Behavioral Sciences & Research Module assessments, journal Club presentations, CPC, Skills Labs must be made up and fulfilled before a student will allowed to sit in the retake exam.

#### **Details of ATTENDANCE POLICY**

The CR is responsible to bring attendance sheets from Student Affairs Office to each class. At the end of class, the attendance sheet must be signed and returned by the faculty member to the Student Affairs Office. No attendance sheets from students will be accepted.

These attendances will be compiled together as follows:

<u>LECTURE ATTENDANCE</u> = # Lectures Attended / Total # of Lectures

<u>PRACTICAL ATTENDANCE</u> = # Practicals Attended / Total # of Practicals

<u>TUTORIAL ATTENDANCE</u> = # Tutorials Attended / Total # of Tutorials

**NOTE**: All tutorials will be conducted by a Senior Faculty Member (AP or above), assisted by a Junior Faculty Member (Lecturer)

#### FINAL CLASS ATTENDANCE =

<u>%Lecture Attendance + %Tutorial Attendance + %Practical Attendance</u>

## **Recommended Reading Material**

- Text Book
- 1) Logan Turner's Diseases of the Nose Throat and Ear

(Edited by: AGD Maran Eleventh edition)

2) Principles and Practices of Oto- Rhino -Laryngology

(Edited by: Iqbal Hussain)

3) Diseases of Ear, Nose & Throat

(Edited by: PL Dhingra 6th edition)

- 4) Reference books
  - a. Current medical diagnosis Otolaryngology 4<sup>th</sup> Edition, Anil Lalwani
  - b. Scott-Brown Otolaryngology-Head & Neck Surgery, 8th edition

## Otolaryngology

## Organization

## Time requirements:

### Lectures

4<sup>th</sup> year= 32 hours

**Clinical Rotations** 

3<sup>rd</sup> year= 96 hours

4<sup>th</sup> year= 144 hours

Total = 272 hours

**ENT** 

3<sup>rd</sup> year

**Clinical rotations** 

## Otolaryngology

## **Clinical Rotations**

S NO	Learning Objectives By the end of this session, students will be able to:	Content Areas	Teaching activity (Duration)	Assessment
1.	Nasal Obstruction     To take detailed history     To describe different etiological factors     To perform clinical examination     To enlist the associated symptoms (S) (A)	<ul> <li>DNS</li> <li>Nasal Polyps</li> <li>Allergic Rhinitis</li> <li>Tumors</li> <li>Adenoids</li> </ul>	Bed side teaching + Out patient demonstration 3 hours	Mini CEX OSPE/OSCE
2.	Rhinorrhea  To take detailed history To describe different etiological factors To perform clinical examination To enlist the associated symptoms (S) (A)	<ul> <li>Allergic rhinitis</li> <li>Sinusitis</li> <li>CSF rhinorrhea</li> <li>Vasomotor rhinitis</li> <li>Rhinolith</li> </ul>	Bed side teaching + Out patient demonstration 3 hours	Mini CEX OSPE/OSCE
3.	Epistaxis  To take detailed history To describe different etiological factors To perform clinical examination To enlist the associated symptoms (S) (A)	<ul> <li>Trauma</li> <li>Tumor</li> <li>Post-surgical</li> <li>Hypertension</li> <li>Anticoagulants</li> </ul>	Bed side teaching + Out patient demonstration 3 hours	Mini CEX OSPE/OSCE
4.	<ul> <li>To take detailed history</li> <li>To describe different etiological factors</li> <li>To perform clinical examination to enlist the associated symptoms         <ul> <li>(S) (A)</li> </ul> </li> </ul>	<ul> <li>Pharyngitis</li> <li>Tonsillitis</li> <li>Quinsy</li> <li>Foreign body</li> <li>Neoplastic</li> </ul>	Bed side teaching  + Out patient demonstration 3 hours	Mini CEX OSPE/OSCE

	Airway			Mini CEX
5.	To take detailed history     To describe different etiological factors     To perform clinical examination to enlist the associated symptoms (S) (A)	<ul> <li>Foreign body</li> <li>Neoplastic</li> <li>Croup</li> <li>Epiglottitis</li> </ul>	Bed side teaching + Out patient demonstration 3 hours	OSPE/OSCE
6.	Change of voice  To take detailed history To describe different etiological factors To perform clinical examination To enlist the associated symptoms (S) (A)	Acute laryngitis     Chronic laryngitis     Vocal cord paralysis     Vocal nodules     Neoplastic	Bed side teaching + Out patient demonstration 3 hours	Mini CEX OSPE/OSCE
9.	Dizziness/Vertigo  To take detailed history To describe different etiological Factors To perform clinical examination to enlist the associated symptoms (S) (A)	CSOM BPPV Meniere's disease	Bed side teaching + Out patient demonstration 3 hours	OSPE/OSCE
10.	Deafness  To take detailed history To describe different etiological factors To perform clinical examination to enlist the associated symptoms (S) (A)	<ul> <li>Otosclerosis</li> <li>TM perforation</li> <li>CSOM</li> <li>Serous otitis media</li> <li>Noise induced hearing loss</li> <li>Meniere's disease</li> </ul>	Bed side teaching  + Out patient demonstration 3 hours	OSPE/OSCE
11.	Facial weakness'/Paralysis  To take detailed history To describe different etiological factors To perform clinical examination to enlist the associated symptoms (S) (A)	Bell's palsy     CSOM     Malignant Otitis externa     Herpes zoster     Trauma     Neoplastic	Bed side teaching  + Out patient demonstration 3 hours	OSPE/OSCE

## Otolaryngology

## Skill lab

S NO	Learning Objectives By the end of this session, students will be able to:	Content Areas	Teaching activity (Duration)	Assessment
1.	To proper handling To examine the External auditory canal, Tympanic membrane (S)	Otoscopy	Demonstrations 2 hours	OSPE/OSCE
2.	To proper handling     To perform the Rinne's     Weber's and ABC tests     (S)	Tuning fork test	Demonstrations 2 hours	OSPE/OSCE
3.	To Proper handling of instruments (S)	Anterior/Posterior Rhinoscopy	Demonstrations 2 hours	OSPE/OSCE

**ENT** 

4<sup>TH</sup> year

Lectures & Clinical Rotations

## **EAR**

S No	Learning Objectives By the end of the session, students will be able to:	Content Areas	Learning Activity (Duration)	Assessment
1.	Discuss the etiology, investigations, treatment and complications for- Acute otitis externa     Describe management of impacted wax and foreign body plans for benign tumors of external ear (K)	Etiology, investigations, treatment and complications for- Acute otitis externa     Management of impacted wax and foreign body plans for benign tumors of external ear	LGIS 50 mins	-
2.	Describe management plan for dealing with trauma to pinna and traumatic rupture of tympanic membrane      Discuss the etiology, investigations, treatment and complications for Malignant otitis externa      Discuss the clinical presentations, examination findings, Investigations, and treatment (K)	Etiology, investigations, treatment and complications for- Acute otitis externa     Management of impacted wax and foreign body plans for benign tumors of external ear	LGIS 50 mins + Demonstrations 90 mins	OSCE MCQs
3.	Discuss the etiology, investigations, treatment, and complications for Myringitis bullosa, Perichondritis and Fungal infections     Discuss the clinical presentations, examination findings, investigations, and treatment plans for malignant tumors of external ear (K)	<ul> <li>Etiology, investigations, treatment, and complications for Myringitis bullosa, Perichondritis and Fungal infections</li> <li>Discuss the clinical presentations, examination findings, investigations, and treatment plans for malignant tumors of external ear</li> </ul>	LGIS 50 mins + Demonstrations 90 mins	OSCE MCQs
4.	Discuss the etiology, pathophysiology, clinical presentations, examination findings, investigations and treatment plans for acute otitis media, Serous otitis media, and Chronic otitis media     Describethediagnosisandmanag ementforcomplicationsofotitisme diaand mastoiditis (K)	Etiology, pathophysiology, clinical presentations, examination findings, investigations and treatment plans for acute otitis media, Serous otitis media, and Chronic otitis media     Diagnosis and management for complications of otitis media and mastoiditis	LGIS 50 mins	MCQs

5.	<ul> <li>Discuss the etiology, pathophysiology, clinical presentations, examination findings, investigations, and treatment plans for Acute necrotizing otitis media</li> <li>Discuss the clinical presentations, examination findings, investigations and treatment plans or benign and malignant tumors of middle ear (K)</li> </ul>	<ul> <li>Etiology, pathophysiology, clinical presentations, examination findings, investigations, and treatment plans for Acute necrotizing otitis media</li> <li>Clinical presentations, examination findings, investigations and treatment plans or benign and malignant tumors of middle ear</li> </ul>	LGIS 50 mins	MCQs
6.	Define deafness List causes of deafness Interpret investigation findings related to deafness (Audiogram, tympanogram) Diagnose deafness and mutism in a child Discuss the differential diagnosis, investigations, and treatment of Tinnitus & Acoustic Neuroma (K)	<ul> <li>Causes of deafness</li> <li>Investigation findings related to deafness (Audiogram, tympanogram)</li> <li>Deafness and mutism in a child</li> <li>Differential diagnosis, investigations, and treatment of Tinnitus &amp; Acoustic Neuroma</li> </ul>	LGIS 50 mins	MCQs
7.	Discuss the clinical presentations and treatment options for vestibula neuritis, benign paroxysmal positional vertigo, Meniere's Disease, and migraine-associated vertigo (K)	Clinical presentations and treatment options for vestibula neuritis, benign paroxysmal positional vertigo, Meniere's Disease, and migraineassociated vertigo	LGIS 50 mins	MCQs

NOSE Lectures

S No	Learning Objectives By the end of the session, students will be able to:	Content Areas	Learning Activity (Duration)	Assessment
1.	Diagnose fractures of the external nose based on history, clinical findings, and investigation findings     Discuss management plan for dealing with trauma to external nose(K)	<ul> <li>Fractures of the external nose based on history, clinical findings, and investigation findings</li> <li>Management plan for dealing with trauma to external nose</li> </ul>	LGIS 50 mins	MCQs
2.	Diagnose congenital lesions of external nose (choanal atresia) based on clinical and investigation findings Based on data provided, discuss management plans for External nose deformities(K)	<ul> <li>Congenital lesions of external nose (choanal atresia) based on clinical and investigation findings</li> <li>Management plans for External nose deformities</li> </ul>	LGIS 50 mins	MCQs
3.	Diagnose epistaxis,     Deviated nasal septum,     Hematoma, septal     abscess, and perforation     Discuss management     plans for epistaxis,     Deviated nasal septum,     Hematoma, septal     abscess, and perforation     (K)	<ul> <li>Epistaxis, Deviated nasal septum, Hematoma, septal abscess, and perforation</li> <li>Management plans for epistaxis, Deviated nasal septum, Hematoma, septal abscess, and perforation</li> </ul>	LGIS 50 mins	MCQs
4.	RHINITIS  Describe the etiology, pathophysiology, clinical presentations, investigations and treatment plans for Allergic Rhinitis and rhinitis due to foreign bodies Describe the etiology, pathophysiology, clinical presentations investigations and treatment plans for common types of Atrophic	<ul> <li>Etiology, pathophysiology, clinical presentations, investigations and treatment plans for Allergic Rhinitis and rhinitis due to foreign bodies</li> <li>Etiology, pathophysiology, clinical presentations investigations and treatment plans for common types of Atrophic Rhinitis, Hyper-Trophic Rhinitis and VMR</li> </ul>	LGIS 50 mins	MCQs

	Rhinitis, Hyper-Trophic Rhinitis and VMR <b>(K)</b>			
5.	Define Polyps     Diagnose Ethmoidal and Antrochoanal Polypus     Discuss management plans for Ethmoidal and Antrochoanal Polypus (K)	<ul> <li>Polyps</li> <li>Ethmoidal and Antrochoanal Polypus</li> <li>Management plans for Ethmoidal and Antrochoanal Polypus</li> </ul>	LGIS 50 mins	MCQs
6.	Diagnose Bleeding Polypus  Discuss management plans for Bleeding Polypus (K)	Bleeding Polypus     Management plans for Bleeding Polypus		
7.	Diagnose foreign bodies in nose (i.e. Rhinoliths) based on examination& investigation findings      Discuss management plans for Rhinolith (K)	<ul> <li>Foreign bodies in nose (i.e. Rhinoliths) based on examination&amp; investigation findings</li> <li>Management plans for Rhinolith</li> </ul>	LGIS 50 mins	MCQs
8.	Diagnose foreign bodies in nose (i.e., Maggots) based on examination &investigation findings     Discuss management plans for Maggots (K)	<ul> <li>Foreign bodies in nose (i.e., Maggots) based on examination &amp;investigation findings</li> <li>Management plans for Maggots</li> </ul>	LGIS 50 mins	MCQs
9.	Discuss the etiology, pathophysiology, clinical presentations, examination findings, investigations, differential diagnosis and treatment plans for: Acute Sinusitis and Chronic Sinusitis     Based on data provided diagnose complications of the above-mentioned conditions     Suggest treatment plan for these conditions diagnose CSF Rhinorrheas based on data provided (K)	<ul> <li>Etiology, pathophysiology, clinical presentations, examination findings, investigations, differential diagnosis and treatment plans for: Acute Sinusitis and Chronic Sinusitis</li> <li>Based on data provided diagnose complications of the abovementioned conditions</li> <li>Suggest treatment plan for these conditions diagnose CSF Rhinorrheas based on data provided</li> </ul>	LGIS 50 mins	MCQs

9.	Discuss the etiology, pathophysiology, clinical presentations, examination in findings, investigation, differential diagnosis and treatment plans for Basal & Squamous Cell Carcinoma, Papilloma & Osteoma (K)	Etiology, pathophysiology, clinical presentations, examination in findings, investigation, differential diagnosis and treatment plans for Basal & Squamous Cell Carcinoma, Papilloma & Osteoma	LGIS 50mins	MCQs
10.	Justify diagnosis, investigations, differential diagnosis, and treatment plans for headaches with emphasis on ENT based (K)	Diagnosis, investigations, differential diagnosis, and treatment plans for headaches with emphasis on ENT causes	LGIS 50 mins	MCQs

THROAT Lectures

S No	Learning Objectives By the end of the session, students will be able to:	Content Areas	Learning Activity (Duration)	Assessment
1.	Discuss the differential diagnosis for neck mass based on data provided (symptoms, signs, investigations) Diagnose diseases of salivary gland (neoplastic, nonneoplastic and parotitis), thyroid gland and lymph nodes based on clinical presentations and investigation findings (K)	Differential diagnosis for neck mass based on data provided (symptoms, signs, investigations)  Diseases of salivary gland (neoplastic, non-neoplastic and parotitis), thyroid gland and lymph nodes based on clinical presentations and investigation findings	LGIS 50 mins	MCQs
2.	Diagnose Thyroglossal cyst/ sinus, Pre-auricular cyst/sinus, Branchial Cyst and Branchial Fistula (K)	Thyroglossal cyst/ sinus, Pre- auricular cyst/sinus, Branchial Cyst and Branchial Fistula	LGIS 50 mins	MCQs
3.	Justify selection of treatment options for the salivary gland conditions on the basis of data given     Diagnose cleft palate and hare lip based on clinical presentation and investigation findings     Describe the embryological defects and etiology for these conditions     Describe treatment options for the above-mentioned conditions (K)	Selection of treatment options for the salivary gland conditions     Cleft palate and hare lip based on clinical presentation and investigation findings     Embryological defects and etiology for these conditions     Treatment options for the abovementioned conditions	LGIS 50 mins	MCQs
4.	BUCCAL CAVITY, ORAL CAVITY, OROPHARYNX  ORAL CAVITY ULCERS  Justify diagnosis, investigations, differential diagnosis and treatment plans on the data given for oral cavity ulcers (Aphthous, Thrush &Leukoplakia (K)	Diagnosis, investigations, differential diagnosis and treatment plans for oral cavity ulcers (Aphthous, Thrush &Leukoplakia)	LGIS 50 mins	MCQs

5.	Justify diagnosis, investigations, differential diagnosis and treatment plans on the basis of the data given for oral cavity ulcers (Traumatic, Vincent's Angina, A granulocytic Tuberculous, Bechet's Disease and Ulcerative lesions of Oral Cavity) (K)	Diagnosis, investigations, differential diagnosis and treatment plans for oral cavity ulcers (Traumatic, Vincent's Angina, A granulocytic Tuberculous, Bechet's Disease and Ulcerative lesions of Oral Cavity)	LGIS 50 mins	MCQs
6.	Justify diagnosis, investigations, differential diagnosis and treatment plans on the basis of data given for Oral Malignant Ulcers (K)	Diagnosis, investigations, differential diagnosis and treatment plans for Oral Malignant Ulcers		MCQs
7.	Justify diagnosis, investigations, differential diagnosis and treatment plans on the basis of data given for Tonsillitis, Peri-tonsillitis and abscess (K)	Diagnosis, investigations, differential diagnosis and treatment plans for Tonsillitis, Peri- tonsillitis and abscess	LGIS 50 mins	MCQs
8.	<ul> <li>Justify diagnosis, investigations, differential diagnosis and treatment plans on the basis of data given for Tumors of tonsils, Sleep apnea syndrome and Ludwig's angina (K)</li> </ul>	Diagnosis, investigations, differential diagnosis and treatment plans for Tumors of tonsils, Sleep apnea syndrome and Ludwig's angina	LGIS 50 mins	MCQs
9.	Justify diagnosis, investigations, differential diagnosis and treatment plans on the basis of data given for Pharyngeal & Retro- pharyngeal abscesses (K)	Diagnosis, investigations, differential diagnosis and treatment plans for Pharyngeal & Retro- pharyngeal abscesses	LGIS 50 mins	MCQs
	OESOPHAGUS			
10.	<ul> <li>Describe etiology, differential diagnosis and investigations for dysphagia (oral, pharyngeal and esophageal) (K)</li> <li>Describe indications, contraindications and complication of esophagoscopy (K)</li> </ul>	<ul> <li>Etiology, differential diagnosis and investigations for dysphagia (oral, pharyngeal and esophageal)</li> <li>Indications, contraindications and complication of esophagoscopy</li> </ul>	LGIS 50 mins	MCQs
11.	<ul> <li>Classify Oesophageal carcinoma</li> <li>Describe the pathophysiology of Oesophageal carcinoma based on symptoms and signs and, investigation findings</li> <li>Develop treatment and follow plans for Oesophageal carcinoma (K)</li> </ul>	Classification of Oesophageal carcinoma     Pathophysiology of Oesophageal carcinoma based on symptoms and signs and, investigation findings     Treatment and follow plans for Oesophageal carcinoma	LGIS 50 mins	MCQs

12.	<ul> <li>Describe aetiology, pathophysiology, investigations and principles of treatment for Vocal Nodules and Vocal cord paralysis</li> <li>Diagnose laryngitis based on symptoms and signs and, investigation findings</li> <li>Develop treatment and follow plans for the abovementioned conditions</li> <li>Describe the aetiology and pathophysiology of supraglottitis, laryngitis</li> <li>Classify laryngeal tumours</li> <li>Diagnose Papilloma Larynx, laryngeal Polyps and Laryngeal Carcinoma based on symptoms and signs and, investigation findings</li> <li>Describe indications, contraindications, complications, operation steps and post (K)</li> </ul>	<ul> <li>Etiology, pathophysiology, investigations and principles of treatment for Vocal Nodules and Vocal cord paralysis</li> <li>Laryngitis based on symptoms and signs and, investigation findings</li> <li>Treatment and follow plans for the above-mentioned conditions</li> <li>Etiology and pathophysiology of supraglottitis, laryngitis</li> <li>Classification laryngeal tumours</li> <li>Papilloma Larynx, laryngeal Polyps and Laryngeal Carcinoma based on symptoms and signs and, investigation findings indications, contraindications, complications, operation steps and post</li> </ul>	LGIS 50 mins	MCQs
13	<ul> <li>Describe the aetiology and pathophysiology of Diphtheria</li> <li>Diagnose Diphtheria based on symptoms and signs and, investigation findings</li> <li>Develop treatment and follow plans for the abovementioned condition (K)</li> </ul>	<ul> <li>Etiology and pathophysiology of Diphtheria</li> <li>Diphtheria based on symptoms and signs and, investigation findings</li> <li>Develop treatment and follow plans for the above-mentioned condition</li> </ul>	LGIS 50 mins	MCQs
14.	<ul> <li>Describe etiology, pathophysiology, investigations and principles of treatment for Glottic stenosis/ Laryngocele, Laryngomalacia</li> <li>Describe etiology and pathophysiology for syphilis, leprosy and non-specific</li> <li>Laryngitis</li> <li>Diagnose syphilis, leprosy and non-specific laryngitis based on symptoms and signs and, investigation findings</li> <li>Develop treatment and follow plans for the above-mentioned conditions (K)</li> </ul>	<ul> <li>Etiology, pathophysiology, investigations and principles of treatment for Glottic stenosis/ Laryngocele, Laryngomalacia</li> <li>Etiology and pathophysiology for syphilis, leprosy and non-specific Laryngitis</li> <li>Sy, leprosy and non-specific laryngitis based on symptoms and signs and, investigation findings</li> <li>Treatment and follow plans for the above-mentioned conditions</li> </ul>	LGIS 50 mins	MCQs

## Problem based learning (PBL) / Case based learning (CBL)

- will be conducted every week
- CPC will be conducted each week

Learning Tool	Theme	Case Scenario	Subjects integrated in CPC
CPC1			Learning objectives will be from All clinical specialties
CPC 2			Learning objectives will be from All clinical specialties

## **Learning Resources:**

The students will be guided to look for the relevant study material from the books, internet guided by each discipline in the study guide in their relevant section in addition to other reference books from the college library

## **Medical Education**

## **Lectures / Workshop**

S.NO	Learning Objectives (domain) At the end of session, student will be able to:	Content Areas	Teaching Activity (Duration)	Assessment
1.	How to do Educational Planning (S)	Educational Planning	Workshop 3 Hours	-
2.	Writing Educational Objectives (How, What, Why) <b>(S)</b>	Educational Objectives	Workshop 3 Hours	
3.	Develop OSPE/OSCE stations (S)	OSPE/OSCE Development	Workshop 3 Hours	
4.	How to do students engagement and Teaching methodologies (S)	Student Engagement & Teaching Methodologies	Workshop 3 Hours	
5.	Prepare TOS and Assessment Planning (S)	TOS and Assessment planning	Workshop 3 Hours	

Learning resource: How to succeed at medical school, Dason Evans & Jo Brown, 2009

# TIME TABLE

## Jinnah Medical & Dental College

MBBS 4 (Batch 21)

#### **EYE/ENT- ORTHOPEDICS MODULE -**

#### WEEK 1

Venue: Monday/Tuesday - JMDC LH103 (Group 1+2 Mon; Group 3+4 Tues) Wed-Saturday - JMCH LH 1 + LH 2

Venue	8:30-9:20	y – JMDC LH103 (Gro 9:25-10:15	up i	10:45-11:35	12:00-1:30	iiuay	- SMOTTETT : EI		1:30-3:00
MON March 1 Group 1 + 2	ANATOMY / EMBRYOL OGY Bone, Cartilage, Joint Development & Histogenesis	PHYSIOLOGY Parathyroid Hormone, Vitamin D, Calcitonin & Bone Metabolism		ANATOM Y EYE Revisi on Anato my of Eye & Orbit	GROUP 1-Physiology Practical- ENT/EYE  (Dry Lab) GROUP 2-Physiology Practical- ENT/EYE  (Wet Lab)  GROUP 3-Physiology Practical- ENT/EYE (Dry Lab)  RE: M  RE: M  RE: M  RE: M  RE: M  RE: M  A  RE: M  M  M  M  M  RE: M  M  M  M  M  M  M  M  M  M  M  M  M		MC	SEARCH DDULE ect Work	
TUES March 2 Group 3 + 4	PHYSIOLOG Y Classification & Role of Ca++, PO4, Vit D	ANATOM Y/ EMBRYO LOGY Long Bone Blood/Nerve Supply & Ossification	TEA BREAK	PHYSIOL OGY Bone Modelling & Remodelling			SEARCH DDULE ect Work		
WED Mar 3	9:00-9:50  CLINICAL PATHOLOGI CAL CONFERENC E Introduction	9:55-10:45  ENT Surgical Ant, Physio, Sx & Congenital Ear Dz		11:00-1:00 CLINIC	CAL WORK		1:15-2:30  PBL Ortho 1.1 1- Surgery-Surgery SR 2-Ob/Gyn- Ob/Gyn SR 3-Medicine- Medicine SR 4- Pediatrics-Peds SR		2:30-3:10 SELF STUDY
THURS Mar 4	ORTHOPEDI CS Congenital & Developme ntal Anomalies	MEDICINE Parathyroid Conditions	<b>~</b>	CLINIC	CAL WORK		PBL Ortho 1.21- Surgery-Surgery SR 2-Ob/Gyn- Ob/Gyn SR 3-Medicine- Medicine SR 4- Pediatrics-Peds SR		SELF STUDY
FRI Mar 5	MEDICINE Osteoporos Osteomalacia	COMMUNITY MEDICINE Natural Disasters Manageme nt	TEA BREAK	CLINICAL WORK SE STUDY		SELF JDY			
SAT Mar 6	MEDICINE Osteoarthriti s	EYE Lid Abnormalities		CLINI	CAL WORK	Po	1:15-2:00 SURGERY / MEDICINE ost PBL Session 1.3	SE	LF STUDY

# **END Of Clinical Posting**

OTO RHINOLARYNGOLOGY TEST THEORY OTORHINOLARYNGOLOGY TEST OSCE