AYUB MEDICAL COLLEGE ABBOTTABAD

DEPARTMENT OF MEDICAL EDUCATION



ENT MODULE

4TH YEAR MBBS

BLOCK: 4

DURATION: 1 YEAR

SESSION:2024

STUDENT NAME

DISCLAIMER

- Developing a study guide is a dynamic process and undergoes iteration according to the needs and priorities.
- This study guide is subjected to the change and modification over the whole academic year.
 - However, students are advised to use it as a guide for respective modules.
 - It is to declare that the learning objectives (general and specific) and the distribution of
 assessment tools (both theory and practical) are obtained from Khyber Medical University,
 Peshawar. These can be obtained from: https://kmu.edu.pk/examination/guidelines
 - The time tables are for guiding purpose. It is to advise that final timetables are always displayed over the notice boards of each lecture hall.
 - Students are encouraged to provide feedback via coordinator.

Contents

1 M	odule Committee:	2
	hat Is A Study Guide?	
	The study guide:	
2.2	Module objectives	3
2.3	Achievement of objectives	3
3 Re	ecommended List Of Icons	4
4 0	rganization of Module	5
	Introduction:	
4.2	Rationale	5
5 Le	earning Objectives	6
5.1	General Learning Outcomes	6
5.	1.1 Knowledge	6
5.	1.2 Skills	7
5.	1.3 Attitude	7
5.2	Specific learning objectives	8
6 CI	linical Schedule	14
7 Ex	xamination and Methods of Assessment:	19
7.1	Instruction:	Error! Bookmark not defined.
8 Le	earning Opportunities and Resources	2
8.1	Books:	2
8.2	Reference Books	2
8.3	Website:	2
9 F	or inquiry and troubleshooting	3
10	Course Feedback Form	4

1 Module Committee:

s.no	Name	Department	Role	
1.	Prof. Dr. Umar Farooq		CEO & Dean	
2.	Prof. Dr. Irfan U. Khattak		Director DME	
Module Team				
3.	Prof. Dr. Farida Khan	ENT	Block Coordinator	
4.	Dr. Tahira Sajid	ENT	Module Coordinator	
5.	Prof. Dr. M. Asif	ENT	Member	

2 What Is A Study Guide?

It is an aid to Inform students how student learning program of the module has been organized, to help students organize and manage their studies throughout the module and guide students on assessment methods, rules and regulations.

2.1 The study guide:

- Communicates information on organization and management of the module.
- This will help the student to contact the right person in case of any difficulty.
- Defines the objectives which are expected to be achieved at the end of the module.
- Identifies the learning strategies such as lectures, small group teachings.

2.2 Module objectives.

- Provides a list of learning resources such as books, computer-assisted learning programs, weblinks, and journals, for students to consult in order to maximize their learning.
- Highlights information on the contribution of continuous on the student's overall performance.
- Includes information on the assessment methods that will be held to determine every student's performance.

2.3 Achievement of objectives.

Focuses on information pertaining to examination policy, rules and regulations.



3 Recommended List Of Icons



Introduction To Case



For Objectives



Critical Questions



Assessment



Resource Material

4 Organization of Module

4.1 Introduction:

Ear, Nose, and Throat (ENT), or otorhinolaryngology, is an important, interesting and diverse specialty. It covers a wide range of areas from the common, such as tonsillitis, to the highly specialised, including cochlear implantation, congenital airway disease, voice disorders, skull base and facial plastic surgery. When you become a doctor, you will encounter ENT pathologies in abundance, some of which can be life threatening.

A study guide can be seen as a management tool which allows a teacher to exercise his responsibility while giving the students an important part to play in managing their own learning. The study guide is carefully designed in such manner that the students are able to better comprehend and analyze the objectives of their course of the ENT department. The guide is put together strategically so the students are not only able to better understand course outlines but gain a development about the practical behavior which needs to be conducted for being a good ENT practioner

4.2 Rationale

Around the world patients suffering from ENT problems are 10% of the workload of GPs and considering there are over 300 million consultations in primary care each year, ENT is one of the largest prevalent groups seen and managed by GPs in the community. Otolaryngology as a speciality sits astride three important areas of acute life threatening emergencies, major oncological and reconstructive surgery and the largest volume of non-threatening ailments which nevertheless affect the quality of life of children and adults. The future of healthcare is significantly affected by the demographic changes of increasing longevity of life with chronic disease burden, end of life care, life style choices such as obesity, smoking, alcoholism and drug addiction as well as the social pressures of unemployment and poverty. All of this will affect every aspect of medicine including Otolaryngology.

Medical education fits in five domains: knowledge and understanding, generic skills, cognitive skills and importantly that of attitude and behaviour. Therefore the ENT curriculum will need to build on the integrated curriculum of basic science with direct patient contact. The components of this clinical experience will build on the knowledge gained, skills and attitudes, judgement, problem solving, reflection, professionalism through working as teams and identifying with the values of society.



5 Learning Objectives

5.1 General Learning Outcomes

By the end of this module the students would be able to;

5.1.1 Knowledge

- 1. Describe the anatomy and physiology of Ear, Nose, Throat & Neck.
- 2. Describe benign and malignant tumors involving the ENT and Head & Neck.
- 3. Discuss differential diagnosis of membrane on the tonsils and describe diphtheria.
- 4. Describe sialadenitis, sialolithiasis and enumerate the benign and malignant salivary tumors.
- 5. Discuss a treatment plan for the patients with various common diseases of the ENT and Head and Neck region.
- 6. Describe dysphagia and its causes, Plummer-Vinson Syndrome and malignant tumors of hypopharynx that could lead to dysphagia and hoarseness along with their management.
- 7. Describe the management of corrosive ingestion and foreign body in the esophagus.
- 8. Describe various congenital and acquired disorders of the ENT and Head & Neck region.
- 9. Describe the significance of hoarseness and stridor & enumerate their causes and clinical features of respiratory obstruction.
- 10. Describe tracheostomy and indications for this procedure.
- 11. Describe squamous cell carcinoma of the larynx and the impact of stage of disease on management and survival of patient.
- 12. Explain the mutual association of hearing and balance disorders & the various conditions that give rise to these disorders.
- 13. Describe the clinical features and course of otosclerosis, Meniere's disease, vestibular neuronitis & BPPV.
- 14. Diagnose suppurative otitis media & describe its intracranial and extra cranial complications.
- 15. Describe the 'rehabilitation of deaf and mute child' and the impact of hearing impairment in children.
- 16. Describe rhino-sinusitis, its various types of rhino-sinusitis and its complications.
- 17. Describe the diseases of the nasal septum & define DNS and enumerate its various types.
- 18. Describe the pathophysiology, types and management of Sino nasal polyposis.
- 19. Enumerate various conditions resulting in nasal obstruction & discharge.
- 20. Describe various types of allergic & non-allergic rhino-sinusitis.

- 21. Enumerate fungal and other granulomatous diseases of the nose & paranasal sinuses and describe their management.
- 22. Categorize various conditions benign & malignant neoplasms of the nose & paranasal sinuses.
- 23. Classify various types of neck swellings and describe clinical differentiating features of benign & malignant neck masses.
- 24. Describe a classification of various lymph nodes levels in the neck and describe the lymphatic drainage of the head and neck.
- 25. Describe the anatomy and physiology of salivary glands
- 26. Describe benign & malignant diseases of the salivary glands

5.1.2 Skills

- 1. Obtain appropriate history, examine Ear, Nose, oral cavity, pharynx, larynx and Neck including mirror examinations and functional examinations of these areas.
- 2. Assist in diagnostic procedures and take swab for culture and sensitivity from ear, Nose & throat under supervision.
- 3. Prescribe hematological investigations, x-ray paranasal sinuses, CT/MRI scan of paranasal sinuses, temporal bone and Head & Neck & interpret it.
- 4. Perform clinical tests of hearing, tuning fork tests and balance independently and Interpret pure tone audiogram & tympanogram.
- 5. Describe the ABC protocol for resuscitation of traumatic patients.
- 6. Differentiate clinically between various types of stridor and possible site of obstruction.

5.1.3 Attitude

Obtain informed consent from patient and communicate with the patients, their families and community regarding diseases & its relevant issues.

5.2 Specific learning objectives

THEME 1: SORE THROAT

TOPIC	Lecture	LEARNING OBJECTIVES	
	hours		
	2 hour	 Discuss the anatomy of oral cavity and site classification of oral cavity. 	
Anatomy & physiology of oral		Discuss applied anatomy of pharynx & mechanism of deglutition	
cavity, Pharynx &		Discuss applied anatomy of nasopharynx and anatomy and physiology of adenoids	
salivary glands		 Discuss applied anatomy of oropharynx and anatomy and physiology of pharyngeal tonsils 	
		5. Discuss the anatomy of minor and major salivary glands	
Acute Pharyngitis	1 hour	Discuss classification, types, aetiology, clinical features, diagnosis and treatment of acute pharyngitis	
Chronic Pharyngitis	1 hour	Discuss classification, types, aetiology, clinical features, diagnosis and treatment of chronic pharyngitis	
Acute Tonsillitis/ Peritonsillar	1 hour	Discuss classification, types, aetiology, clinical features, diagnosis and treatment of acute tonsillitis	
abscess (Quinsy)		Discuss the aetiology, clinical features and treatment of quinsy	
Chronic Tonsillitis	1 hour	 Discuss classification, types, aetiology, clinical features, diagnosis and treatment of chronic tonsillitis 	
Oral ulceration	1 hours	11. Enumerate differential diagnosis of oral ulcers and discuss management of Aphthous ulcers	
Trauma to the palate and	1 hour	 Discuss the principles of soft tissue & bone repair in palatal and pharyngeal trauma. 	
Oropharynx			
Carcinoma of oral cavity	1 hour	 Discuss the aetiology , clinical features and treatment of oral carcinoma 	
Approach to a patient with sore	1 hour	14. Enumerate differentials of sore throat and discuss important differentiating points	
throat			
Anatomy &	1 hour	15. Describe the anatomy & physiology of parotid,	
physiology of salivary glands		submandibular, sublingual & minor salivary glands	
Non neoplastic	1 hour	16. Describe non neoplastic disorders of salivary glands, its	
disorders of the		management and treatment	
salivary glands			
Sialolithiasis and	1 hour	17. Describe stone formation and stasis of secretions in the	
sialectasis	_	salary glands and its management	
Neoplasm of	1 hour	18. Describe the features, course and management of benign	

salivary glands		and malignant, submandibular, sublingual and minor
		salivary glands
Complications of	1 hour	19. Describe in detail different surgical procedures of salivary
salivary gland		glands and its complications
surgeries		

THEME 2: DIFFICULTY IN SWALLOWING

TOPIC	LECTURE HOURS	LEARNING OBJECTIVES
Dysphagia & Plummer Vinson Syndrome	1 hour	 Discuss Dysphagia & the anatomy and physiology of Esophagus and the appropriate medical and surgical treatment of dysphagia. Discuss PVS & the predisposing factors for causation & management
Pharyngeal and esophageal Pouches	1 hour	 Discuss Pharyngeal pouch & the predisposing factors, clinical features and treatment.
Oropharyngeal Tumors	1 hour	 Enumerate oropharyngeal tumors. Discuss the types, aetiology and treatment of oropharyngeal carcinoma.
Hypo pharyngeal Tumors	1 hour	 Enumerate oropharyngeal tumors. Discuss the aetiology and treatment of hypo pharyngeal carcinoma.
Tumors of Esophagus.	1 hour	Classify esophageal tumors & describe the etiology, clinical features and treatment options.

THEME 3: Hoarseness and Stridor

TOPIC	LECTURE	LEARNING OBJECTIVES
	HOURS	
Applied anatomy of	2 hour	20. Discuss applied anatomy of larynx
potential spaces in &		21. Discuss the pre-piglottic, paraglottic & Rinke's
around the larynx and neck		space.
Anotomy of Detential neek	3 hour	22. Discuss anatomy of deep fascia of neck &
Anatomy of Potential neck		anatomy of potential pharyngeal and neck
spaces		spaces.

		23. Discuss surgical anatomy of peritonsillor,
		parapharygeal & submandibular spaces
		24. Discuss anatomy of retro pharyngeal space
	2 hour	25. Discuss applied anatomy of Larynx.
Applied anatomy &		26. Discuss the physiology of larynx.
physiology of Larynx/neck,		27. Discuss the physiology of voice, speech
Voice physiology		production & its regulation
	1 hour	28. Discuss aetiology, clinical features, diagnosis and
Acute Laryngitis		treatment of acute simple laryngitis
	1 hour	29. Discuss chronic laryngitis including chronic
Chronic Laryngitis		granulomatous conditions of the larynx, its
		clinical features, diagnosis and treatment.
Vessl redules 9 years	1 hour	30. Discuss differentiating points between vocal
Vocal nodules & vocal		nodules & polyps, its aetiology, clinical features,
polyps		diagnosis and treatment.
Vocal cord paralysis	1 hour	31. Discuss paralytic causes of hoarseness, its types,
vocai cord paraiysis		clinical features, diagnosis and treatment.
	1 hours	32. Enumerate causes of stridor. Explain types of
Stridor		stridor. Discuss management of congenital
		stridor
Apyrexial causes of stridor	1 hour	33. Discuss the aetiology and management of
Apyrexial causes of striuor		acquired apyrexial causes of stridor
LECTUREPyrexial causes	1 hour	34. Discuss the aetiology and management of
LECTOREPYTEXIAL CAUSES		pyrexial causes of stridor
Laryngeal trauma	1 hour	35. Discuss the management of laryngeal trauma
Acute Respiratory	1 hour	36. Discuss signs of respiratory obstruction.
obstruction		Enumerate alternate airways & discuss
		tracheostomy.
Laryngotracheal Foreign	1 hour	37. Discuss the aetiology, types & treatment of
body		Laryngotracheal Foreign bodies.
	1 hour	38. Discuss incidence, epidemiology, risk factors,
Malignant Tumours of the		Pathology & classification of carcinoma larynx.
Larynx / Carcinoma of		
Larynx		39. Discuss UICC classification of laryngeal sites &
		subsites. Discuss management of carcinoma of
		all the subsites
	1 1 1 1	4. Diamonda differentiale diamonda of har
Approach to a patient with	1 hour	Discuss the differentials diagnosis of hoarseness
hoarsesness		and explain management approach to a patient
		presenting with hoarseness

THEME 4: Deafness, Ear Discharge & Dizziness

TOPIC	LECTURE	LEARNING OBJECTIVES
	HOURS	
	2 hour	40. Describe the applied anatomy of the external, middle & internal ear. 41. Discuss the functions of the ear
Applied Anatomy and		42. Discuss the functions of the ear 42. Discuss basic principles & interpretation of
Physiology of Ear		various tuning fork tests
		43. Discuss the interpretation of PTA & impedance
		audiometry
	1 hour	2. Classify the trauma to external ear and the
Trauma to External Ear and		temporal bone and
the Temporal Bone		3. Describe the appropriate imaging investigations
		& treatments.
	1 hour	4. Discuss Otitis Externa, its clinical features,
Otitis Externa		differential diagnosis and relevant clinical &
		radiological investigations and treatment.
	1 hour	5. Discuss acute suppurative otitis media.
Acute Suppurative otitis		Describe its clinical features, differential
media		diagnosis and relevant clinical & radiological
	1 hour	investigations and treatment 6. Discuss Chronic Suppurative Otitis Media and
Chronic Suppurative Otitis	Tiloui	its clinical features, differential diagnosis and
Media without		relevant clinical & radiological investigations
chloesteatoma		and treatment.
Chuania Communation Otitia	1 hour	7. Discuss cholesteatoma and its clinical features,
Chronic Suppurative Otitis Media with Cholesteatoma		differential diagnosis and relevant clinical &
iviedia with Cholesteatoma		radiological investigations and treatment.
	1 hour	8. Discuss intracranial & extracranial otogenic
Complications of		complications and enumerate the appropriate
Suppurative Otitis Media.		clinical & radiological investigations and
	4 1 -	treatment.
Mastoiditis: Acute and	1 hour	9. Discuss mastoiditis, its clinical features,
Chronic		differential diagnosis and relevant clinical &
	1 hour	radiological investigations and treatment. 10. Discuss acoustic neuroma & the appropriate
Acoustic Neuroma	I Houl	clinical, audiological and imaging studies used in
, 100 40 110 HC 41 01114		diagnosis and treatment of acoustic neuroma.
	1 hour	11. Discuss the differential diagnosis of hearing loss
Approach to patient with a		& the medical and surgical management of CHL.
Conductive hearing loss		12. Discuss Otoscleosis & its medical & surgical
		treatment of otosclerosis

TOPIC	LECTURE HOURS	LEARNING OBJECTIVES
	1 hour	13. Discuss OME & its medical and surgical treatment
	1 hour	
Approach to patient with a	3 hour	14. Discuss SNHL & its differential diagnosis.
Sensorinueral Hearing		15. Discuss tinnitus & its management.
Loss(SNHL)		16. Discuss Ototoxicity & its management.
Vertigo Vestibular Neuronitis Meniere's Diseases BPPV	1 hour	 17. Discuss true vertigo & its types, pathophysiology, investigations & management 18. Discuss Meniere's disease & its treatment. 19. Discuss BPPV & its clinical features, diagnoses & treatment.
Approach to a deaf patient	1 hour	20. Discuss the approach to a deaf patient.
Approach to Management of Deaf Child	1 hour	21. Differentiate congenital, developmental and acquired hearing loss & describe the impact of hearing impairment at various ages and their
		management.

THEME 5: Nasal Obstruction

TOPIC	LECTURE	LEARNING OBJECTIVES
	HOURS	
Applied Anatomy, Physiology of Nose & Paranasal Sinuses	2 hour	44. Discuss the surgical anatomy, physiology & congenital disorders of the nose & PNS.45. Discuss the congenital disorders of the nose, palate & choanal atresia
Diseases of the Nasal Septum	1 hour	22. Discuss DNS, its types, the clinical features, medical & surgical treatment of nasal obstruction.
Sino-Nasal Polyposis	1 hour	23. Discuss sino-nasal polyposis, its types and describe the clinical features, medical & surgical treatment of nasal polyps.
Fungal Rhinosinusitis	1 hour	24. Discuss various fungi implicated in fungal rhinosinusitis and the appropriate clinical, radiological investigations and treatment of fungal rhinosinusitis.
Sino-Nasal Tumors	1 hour	25. Discuss various benign and malignant tumors affecting the nose and paranasal sinuses and their clinical features, step involved in diagnosis and treatment options.
Trauma to Nose and Face and CSF rhinorhhea	1 hour	26. Discuss the Le Forte classification of mid face fractures & the appropriate clinical and radiological investigations & management of

TOPIC	LECTURE	LEARNING OBJECTIVES
	HOURS	these fractures.
		27. Discuss CSF rhinorrhea and the predisposing
		factors, types, clinical features, investigations
		and treatment.
	1 hour	28. Discuss rhinogenic headaches and the
Headaches and Facial Pain		appropriate clinical, radiological investigations
		and treatment.
Granulomatous Diseases of	1 hour	29. Discuss various granulomatous disorders
the Nose		affecting the nose & the clinical features,
	1 ha	investigations & treatments.
Adenoids	1 hour	30. Discuss anatomy diseases of adenoids and treatment
	1 hour	31. Enumerate diseases of the nasopharynx
Juvenile Nasopharyngeal	Tilodi	32. Discuss Juvenile nasopharyngeal angiofibroma,
Angiofibroma		clinical features, investigations and treatment.
	1 hour	33. Discuss the risk factor, clinical features,
Nasopharyngeal Carcinoma		investigation, treatment and follow up
		nasopharyngeal carcinoma
	1 hour	34. Discuss acute sinusitis & the appropriate
Acute Sinusitis		clinical, radiological investigations and steps
		involved in treatment of patients.
	1 hour	35. Discuss chronic sinusitis & the appropriate
Chronic Sinusitis		clinical, radiological investigations and steps
	4 5	involved in treatment of patients.
Complications of Sinusitis	1 hour	36. Enumerate the predisposing factors for development of complications due to sinusitis
Complications of sinusitis		37. Discuss treatment.
	1 hour	38. Discuss allergic rhinitis and its types,
	111001	pathophysiology, investigations & the medical
Allergic Rhinitis (AR) and		and surgical treatment.
Non- allergic		39. Discuss non –allergic rhinitis and the
_		appropriate clinical and radiological
		investigations and its treatment.
Infective Rhinitis: Acute. &	1 hour	40. Discuss infective rhinitis and the medical and
Chronic.		surgical treatment of various types of acute and
		chronic infective rhinitis.
Foreign Body, Rhinolith, Maggots Nose	1 hour	41. Discuss Rhinolith and maggots in the nose and
		the appropriate medical and surgical treatment
	1 hours	of patients with these conditions.
Approach to a patient with	1 hour	42. Approach to a patient with epistaxsis
Epistaxis		43. Discuss epistaxis & the appropriate clinical, radiological & hematological investigations &
		raulological & Herriatological Hivestigations &

TOPIC	LECTURE HOURS	LEARNING OBJECTIVES
		treatment of the condition.

THEME 6: Neck Swelling

TOPIC	HOURS	LEARNING OBJECTIVES
Para pharyngeal Abscess	1 hour	44. Discuss the aetiology and management of each Para pharyngeal abscess.
Retropharyngeal Abscess	1 hour	45. Discuss the types, aetiology, ttreatment and complications of each retropharyngeal abscess.
Submandibular Abscess	1 hour	46. Discuss the causes and treatment of submandibular abscess.
Trauma of the Larynx and Neck	1 hour	47. Classify the nature of trauma to the neck& larynx48. Discuss clinical features, investigations and treatment.
Approach to a neck swelling	1 hour	49. Discuss the approach to a neck swelling.
Evaluation of metastatic lymph nodes and occult primary in Neck (Occult Primary).	1 hour	 50. Discuss Occult primary & the predictable nodal drainage in head and Neck region. 51. Discuss the signs and symptoms of occult primary & the appropriate clinical and radiological investigations & different treatment options.

6 Clinical Schedule

Theme 1: Foundation of Otorhinolaryngology & Head and Neck

Topic	Hours	Learning objectives	Assessment method
History taking	01	1. Obtain detailed history of sore throat	OSCE
Examination	02	Perform Examination in a sore throat patient including general physical, local and systemic examination	OSCE
Nasopharyngeal examination	02	 Perform mirror examination of nasopharynx 	OSCE
Examination of oral cavity and oropharynx	02	Examine oral cavity and oropharynx in a systematic way	OSCE
Hypopharyngeal Examination	01	Perform Indirect hypopharyngoscopy with mirror	OSCE

Mouth gauge and	01	6. Assemble mouth gauge and name the	OSCE
other instruments		instrument used in tonsillectomy with	
other instruments		utility of each instrument.	
Examination of Neck	02	7. Perform systematic examination of	OSCE
Examination of Neck		Neck	

Theme 2: Sore Throat

Topic	Hours	Learning objectives	Assessment method
Communicate with	01	8. Obtain a pre-operative informed	OSCE
patient of		consent from a patient of	
tonsillectomy		tonsillectomy	
Tonsillar surgery &	02	9. Observe tonsillectomy surgery and	OSCE
its instruments		identify instruments used	
Conservative	01	10. Discuss a conservative management	OSCE
management of sore		plan for inpatient acute follicular	
throat		tonsillitis	
Scrubbing technique	01	11. Demonstrate scrubbing hands using	OSCE
		proper solution & take proper time by	
		proper method	
Biopsy from oral	01	12. Assist to take a biopsy from tongue	OSCE
ulcer		ulcer	

Theme 3: Difficulty in Swallowing

Topic	Hours	Learning objectives	Assessment method
Rigid Endoscopy system	01	 Identify instruments & equipment used in rigid endoscopy system, describe rigid endoscopies. 	OSCE
Oral & oropharyngeal mass palpation	01	14. How to palpate a mass in the oral cavity and oropharynx	OSCE
Oesophagoscopy	02	 Observe rigid oesophagoscopy done for pharyngeal growth or dysphagia 	OSCE

Theme 4: Hoarseness and Stridor

Topic	Hours	Learning objectives	Assessment method
History taking	02	16. Obtain detailed history of hoarseness& stridor	OSCE
Examination	02	17. Perform Examination in a patient with hoarseness & stridor, including general physical, local and systemic examination	OSCE
Indirect laryngoscopy examination	01	18. Perform mirror examination of Laryngopharynx	OSCE
Examination of Neck	01	19. Perform systematic examination of Neck	OSCE
Investigations of Laryngeal diseases	01	20. Fill requisition form for different types of investigations for Laryngeal diseases.	OSCE
Video laryngoscopy	01	21. Observe a video of laryngoscopy for the diagnosis of hoarseness in clinical setting	OSCE
Conservative management of Hoarseness	01	22. Discuss a conservative management plan for a patient of hoarseness due to voice abuse.	OSCE
Laryngoscopy	02	23. Observe rigid system laryngoscopy under general anesthesia and identify instruments used in the procedure	OSCE
Communicate with a patient for voice rest	01	24. Counsel a patient on voice rest	OSCE
Stridor in bilateral abductor vocal paralysis	02	25. Council bilateral abductor paralysis patient & its management in a post thyroidectomy patient	OSCE
Biopsy from laryngeal growth.	01	26. Observe the procedure for taking biopsy from laryngeal growth.	Formative
Tracheostomy	01	27. Demonstrate the procedure of tracheostomy	Formative
Communicate with patient on laryngectomy	01	28. Demonstrate the procedure how to Obtain informed consent from a patient for total laryngectomy	OSCE

Theme 5: Deafness, Ear Discharge & Dizziness

Topic	Hours	Learning objectives	Assessment method
History taking	02	29. Obtain detailed history from a patient with ear	

		discharge/deafness/dizziness	
Local Examination	01	30. Perform clinical examination of the hearing & balance system.	OSCE
Otoscopy Tuning fork test Balance testing Examination under microscope	03	31. Perform otoscopic examination of the ear32. Perform tuning fork tests33. Perform test of balance, peripheral & central34. Assist in performing EUM	OSCE
Investigations of ear diseases	01	35. Discuss & fill requisition form for different types of investigations for ear diseases.	OSCE
Interpretation of audiogram and Impedance	01	36. Discuss the interpretation of audiogram and impedance.	OSCE

Theme 6: Nasal Obstruction

Topic	Hours	Learning objectives	Assessment method
History taking	02	37. Obtain detailed history from a patient with nasal obstruction	OSCE
Local Examination	01	38. Perform clinical examination of the nose & paranasal sinuses.	
Anterior & posterior Rhinoscopy Probe test		39. Perform anterior & posterior Rhinoscopies with mirror 40. Perform probe test	OSCE
Nasendoscopy Pus culture / sensitivity	01	41. Assist in performing nasendoscopy. 42. Perform Take swab from nose for different purpose	OSCE
X – Rays nasopharynx /PNS	01	43. interpret X – Rays nasopharynx/PNS for enlarged soft tissues shadow	OSCE
Nasal patency & adenoid facies in enlarged adenoids	01	44. Perform examination for nasal patency in enlarged adenoids.	OSCE
Adenoid surgery	01	45. Observe adenoid surgery being done in operating room	Formative
CT scan nose & nasopharynx	01	46. Interpret CT scan in nasopharyngeal angiofibroma, describe bowing sign.	Formative
Nasopharyngeal Biopsy	01	47. Observe surgery for nasopharyngeal biopsy	Formative
Investigations of nose & paranasal sinuses diseases	01	48. Document Fill requisition form for different types of investigations for nose & paranasal sinuses diseases.	Formative
Referal call protocol		49.	

Theme 7: Swelling Neck

Topic	Hours	Learning objectives	Assessment method
Examination of Neck Nodes	02	50. Perform systematic examination of all groups of neck nodes	OSCE
Examination of lump in the neck	01	51. Perform examination of lump in the neck in a systematic way.	
Surgery on a pharyngeal abscess	01	52. Observe surgery on a pharyngeal abscess & describe drainage of peritonsillar abscess	OSCE
Thyroid examination	01	53. Perform Thyroid Examination both anatomically & functionally	OSCE
Pharyngeal abscess surgery related instruments	01	54. Identify instruments used in drainage of pharyngeal abscess surgery	OSCE
Examination of parotid	01	55. Perform examination of parotid swelling	OSCE
Examination of thyroid	01	56. Perform examination of thyroid gland	OSCE



7 Examination and Methods of Assessment:

The year-4 will be assessed in 5 blocks.

- 1) Block-1 (Neurosciences-2 module) will be assessed in paper-J.
- 2) Block-2 (GIT and hepatobiliary module-2 will be assessed in paper-K.
- 3) Block-3 (Renal-2, Endocrine and Reproduction-2 module) will be assessed in paper-L.
- 4) Block-4 (ENT module) will be assessed in paper M-1.
- 5) Block-5 (Eye module) will be assessed in paper M-2.
- 6) Each written paper consists of 120 MCQs except for ENT & Eye papers which includes 90 MCQs each.
- 7) Internal assessment will be added to final marks in KMU.
- 8) For ENT (M-1 module) and Eye (M-2 module), the marks allocated for each OSCEstation will be 5, while the rest of the modules are allotted 6 marks per OSCE station.
- Practical assessment will be in the form of OSPE/OSCE which will also include embedded viva stations.

Assessment Plan for 4th Year MBBS Theory Modules Theory Internal OSPE/OSP Internal TOTA assessment assessment paper marks OSPE/OSP theory MARK (10%) E(10%) S Paper J Neurosciences-2 120 13 120 13 266 GIT-2 Paper K 120 13 120 13 266 Paper L Renal-2 and 120 14 120 13 267 Endocrine and Reproduction Paper M-1 90 75* 183 ENT 10 8 Paper M-2 EYE 90 10 75* 8 183 Research** 35 Total 480 53 **500** 67 1200 Mark

^{*}For ENT (M-1 module) and Eye (M-2 module), the marks allocated for each OSCE station will be 5, while the rest of the modules are allotted 6 marks per OSPE/OSCE station.

^{**}Research viva of 20 marks will be conducted in paper-L. However, the rest of the 15 marks will be decided by the concerned department internally for the contribution of the students in research project/thesis.

Paper M-1 (ENT module)

Table-7: MCQs

Module	Total MCQs
ENT	90

Table-8: OSCE

Module	Total OSCE stations
ENT	15

- For blocks J, K, and L, a minimum of 20 stations will be used in final exams. Total marks will be 120 (6 marks for each station).
- For M-1 and M-2, there will be 15 stations during each assessment with5 marks per station.



8 Learning Opportunities and Resources

8.1 Books:

Diseases of Ear, nose and Throat by Logan Turner, 11th edition

Principles and Practice of Oto-Rhino-Laryngology 6th Edition Pdf Free Download by Iqbal Hussain

Udaipurwala

3. Diseases of Ear, Nose and Throat by P.L. Dhingra, 6th edition

8.2 Reference Books

- 1. Current medical diagnosis & treatment by Maxine A. Papadakis
- 2. Scott-Brown's Otorhinolaryngology, Head & Neck Surgery

8.3 Website:

https://medicalstudyzone.com/principles-and-practice-of-oto-rhino-laryngology-pdf-free-download-by-iqbal-hussain-udaipurwala/

https://booksinn.com.pk/product-category/medical-sciences/e-n-t-and-otorhinolaryngology/
https://www.freebookcentre.net/medical_text_books_journals/ENT-Books.html

9 For inquiry and troubleshooting



Please contact

Professor Dr Farida Khan Chairperson ENT Department Ayub Medical Institution Abbottabad

10 Course Feedback Form Course Title: Semester/Module Dates: Please fill the short questionnaire to make the course better. Please respond below with 1, 2, 3, 4 or 5, where 1 and 5 are explained. THE DESIGN OF THE MODILUE A. Were objectives of the course clear to you? γ | | B. The course contents met with your expectations I. Strongly disagree 5. Strongly agree C. The lecture sequence was well-planned I. Strongly disagree 5. Strongly agree D. The contents were illustrated with I. Too few examples 5. Adequate examples E. The level of the course was I. Too low 5. Too high F. The course contents compared with your expectations I. Too theoretical 5. Too empirical G. The course exposed you to new knowledge and practices I. Strongly disagree 5. Strongly agree H. Will you recommend this course to your colleagues? I. Not at all 5. Very strongly THE CONDUCT OF THE MODLUE A. The lectures were clear and easy to understand I. Strongly disagree 5. Strongly agree B. The teaching aids were effectively used I. Strongly disagree 5. Strongly agree C. The course material handed out was adequate

I. Strongly disagree

I. Strongly disagree

E. Were objectives of the course realized? Y

D. The instructors encouraged interaction and were helpful

5. Strongly agree

5. Strongly agree

Ν

	90% - 100%	()	60% - 70%	()
	80% - 90%	•)	50% - 60%)
	70% - 80%	()	below 50%)
ease comment or	n the strengths c	of the co	ourse and t	the way it was con-	ducted.	
Please comment or	n the weaknesse	s of the	e course an	d the way it was c	onducte	d.
Please give suggest	ions for the imp	roveme	ent of the c	course.		
Optional – Your nar	me and contact a	address	5:			
)ptional – Your nar	me and contact a	address	5:			
)ptional – Your nar	me and contact :	address	5:			
)ptional – Your nar	me and contact a	address	5:			Thank you!
)ptional – Your nar	me and contact a	address	s:			Thank you!