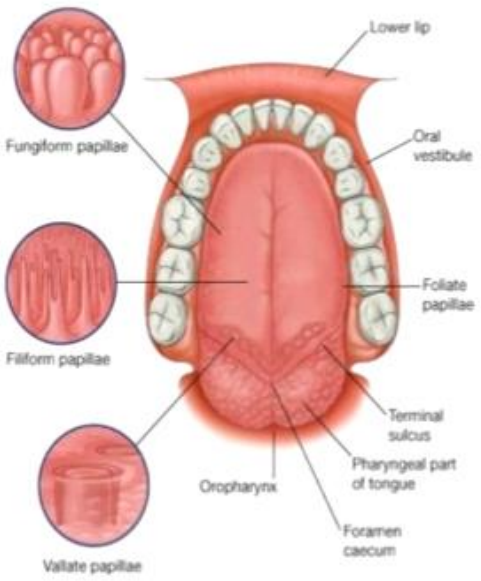


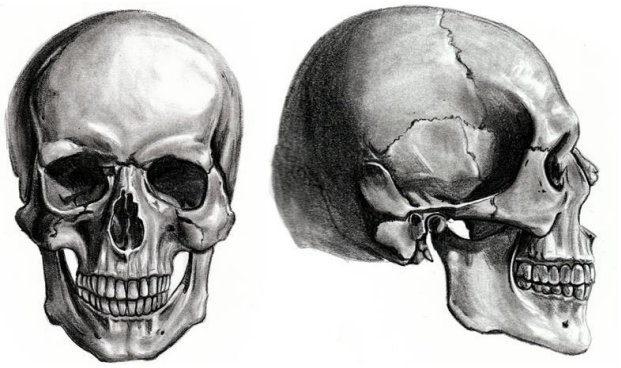
STUDY GUIDE

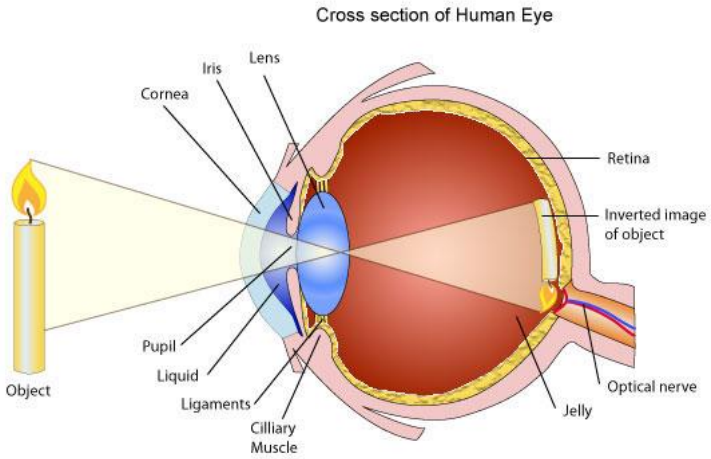
HEAD & NECK MODULE

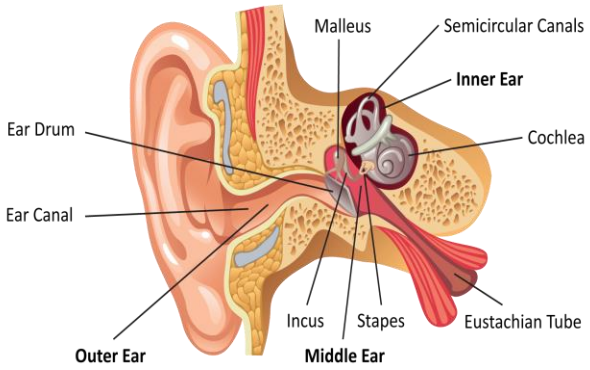
SECOND YEAR MBBS
SEMESTER 3

18th Dec 2017 – 20th Jan 2018

Duration: 5 Weeks







LIAQUAT NATIONAL HOSPITAL

& MEDICAL COLLEGE

STUDY GUIDE FOR HEAD & NECK MODULE

Module name: **Head & Neck**

Semester: **Three** *Year:* ***Two*** *Duration:* ***5 weeks***

Timetable hours: **Lectures, Case-Based Learning (CBL), Self-Study, Practical, Skills, Demonstrations, Visit to Wards & Laboratory**

Credit hours: **3 credit hours in theory and 1.5 credit hours in practical**

MODULE INTEGRATED COMMITTEE

MODULE COORDINATOR:	• Dr. Saima Athar (Anatomy)
CO-COORDINATORS:	• Professor Nighat Huda, DHCE • Dr. Amna Khursheed (Pathology)

DEPARTMENTS' & RESOURCE PERSONS' FACILITATING LEARNING

BASIC HEALTH SCIENCES	CLINICAL AND ANCILLARY DEPARTMENTS
ANATOMY • Professor Zia-ul-Islam • Professor Masood Ahmad	***ENT*** • Prof. Shakil Akil • Dr. Ahmad Nawaz
BIOCHEMISTRY • Professor Jawed Altaf Baig	***NEUROSURGERY*** • Dr. Salman Sharif
COMMUNITY MEDICINE • Professor Rafiq Soomro	***OPHTHALMOLOGY (EYE)*** • Dr. Imran Ghayoor
PATHOLOGY • Professor Naveen Faridi	
PHYSIOLOGY • Professor Syed Hafeezul Hassan	

DEPARTMENT of HEALTHCARE EDUCATION

Professor Nighat Huda, Dr. Mirza Aroosa Beg, Dr. Sobia Ali
Dr. Afifa Tabassum, Dr. Muhammad Suleman Sadiq, Dr. Mehnaz Umair

LNH&MC MANAGEMENT

- Professor Amir Ali Shoro, Dean & Principal, Director FHS LNH&MC
- Dr. Shaheena Akbani, Controller A.A & R.T LNH&MC

STUDY GUIDE COMPILED BY: **Dr. Mehnaz Umair**, ***Department of Health Care Education***

INTRODUCTION

WHAT IS A STUDY GUIDE?

It is an aid to:

- Inform students how student learning program of the semester-wise module has been organized
- Help students organize and manage their studies throughout the module
- Guide students on assessment methods, rules and regulations

THE STUDY GUIDE:

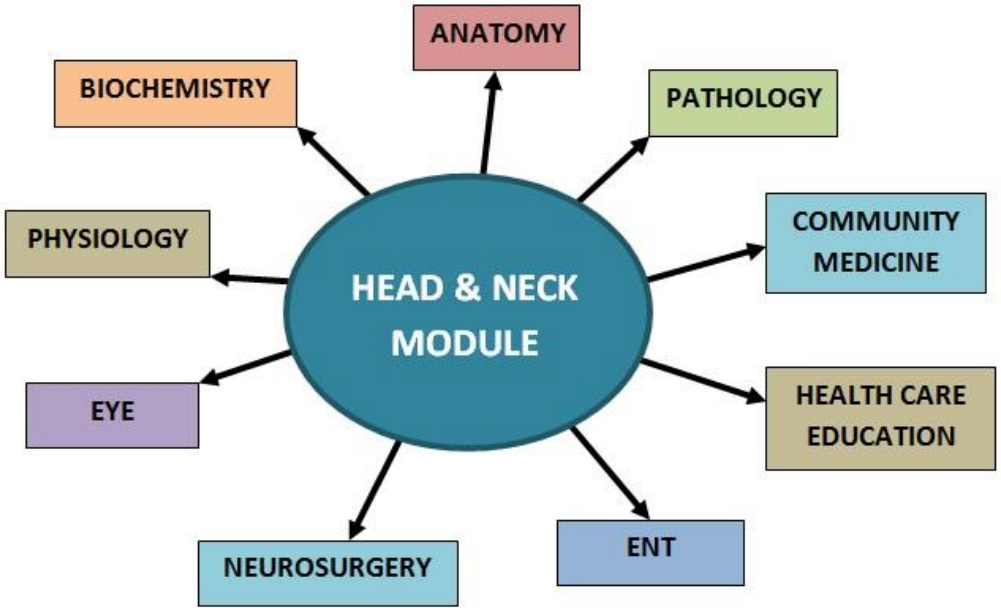
- Communicates information on organization and management of the module.
  This will help the student to contact the right person in case of any difficulty.
- Defines the objectives which are expected to be achieved at the end of the module.
- Identifies the learning strategies such as lectures, small group teachings, clinical skills, demonstration, tutorial and case based learning that will be implemented to achieve the module objectives.
- Provides a list of learning resources such as books, computer assisted learning programs, web- links, journals, for students to consult in order to maximize their learning.
- Highlights information on the contribution of continuous and semester examinations on the student's overall performance.
- Includes information on the assessment methods that will be held to determine every student's achievement of objectives.
- Focuses on information pertaining to examination policy, rules and regulations.

CURRICULUM FRAMEWORK

Students will experience *integrated curriculum* of 1st and 2nd semesters**.**

INTEGRATED CURRICULUM comprises of system-based modules such as Head and Neck, Neurosciences and Endocrinology which links basic science knowledge to clinical problems. Integrated teaching means that subjects are presented as a meaningful whole. Students will be able to have better understanding of basic sciences when they repeatedly learn in relation to clinical examples.
Case-based discussions, computer-based assignments, early exposure to clinics, wards, and skills acquisition in skills lab and physiotherapy department are characteristics of integrated teaching program.

INTEGRATING DISCIPLINES OF HEAD & NECK MODULE



LEARNING METHODOLOGIES

The following teaching / learning methods are used to promote better understanding:

- Interactive Lectures
- Hospital / Clinic visits
- Small Group Discussion
- Case- Based Learning
- Practicals
- Skills session
- Self Study

INTERACTIVE LECTURES

In large group, the lecturer introduces a topic or common clinical conditions and explains the underlying phenomena through questions, pictures, videos of patients' interviews, exercises, etc. Students are actively involved in the learning process.

HOSPITAL VISITS: In small groups, students observe patients with signs and symptoms in hospital or clinical settings. This helps students to relate knowledge of basic and clinical sciences of the relevant module.

SMALL GROUP DISCUSSION (SGDS): This format helps students to clarify concepts acquire skills or attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials and self study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

CASE- BASED LEARNING: A small group discussion format where learning is focused around a series of questions based on a clinical scenario. Students' discuss and answer the questions applying relevant knowledge gained in clinical and basic health sciences during the module.

PRACTICAL: Basic science practicals related to anatomy, biochemistry, pathology, pharmacology and physiology are scheduled for student learning.

SKILLS SESSION: Skills relevant to respective module are observed and practiced where applicable in skills laboratory or Department of Physiotherapy.

SELF STUDY: Students' assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Center, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours of self-study.

ASSESSMENT METHODS:

Theory (knowledge): **Best Choice Questions (BCQs)** also known as MCQs (Multiple Choice Questions) and **EMQs (Extending Matching Questions)** are used to asses objectives covered in each module.

BCQs:

- A BCQ has a statement or clinical scenario followed by four options (likely answers).
- After reading the statement/scenario student select ONE, the most appropriate answer/response from the given list of options.
- **Correct answer carries one mark, and incorrect 'zero mark'. There is NO negative marking.**
- Students mark their responses on specified computer-based sheet designed for LNHMC.

EMQs:

- An EMQ has:
  - An option list of 5-15 nerve supply, functions, diagnosis, investigations etc
  - A Lead In –Statement/Question
  - Two to four Stems or Clinical Scenarios

- For each stem or clinical scenario, the student should choose the most appropriate option from the option list.
- A single option can be used once, more than once or not at all.
- Correct answer carries one mark and incorrect 'zero mark'. There is **NO** negative marking.
- Student mark their responses on a specified computer-based sheet for EMQs.

OSPE: Objective Structured Practical Examination

- The content may assess application of knowledge, or practical skills.
- Student will complete task in define time at one given station.
- All the students are assessed on the same content by the same examiner in the same allocated time.
- A structured examination will have observed, unobserved, interactive and rest stations.
- Observed and interactive stations will be assessed by internal or external examiners.
- Unobserved will be static stations in which students will have to answer the questions related to the given pictures, models or specimens the provided response sheet.
- Rest station is a station where there is no task given, and in this time student can organize his/her thoughts.

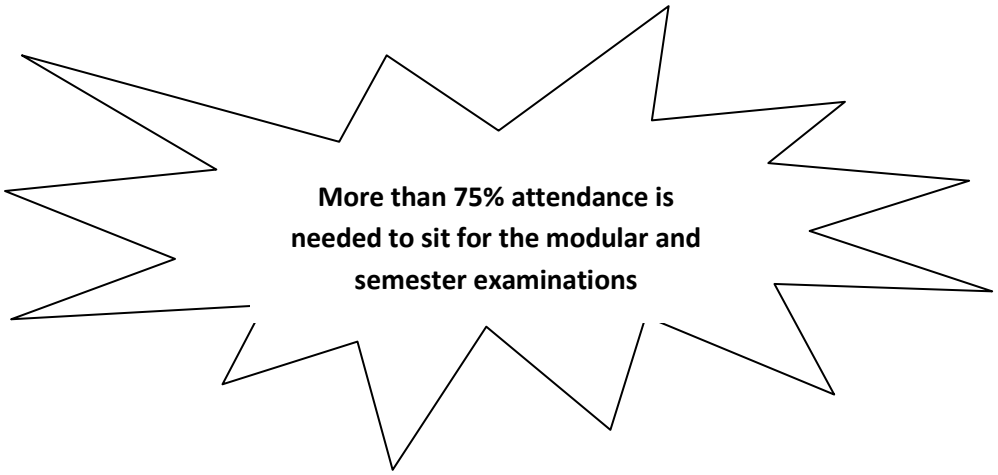
Internal Evaluation

- During the module, students will be assessed to determine achievement of module objectives.
- **Module Examination:** will be scheduled on completion of each module. The method of examination comprises theory exam which includes BCQs, and practical (Objective Structured Practical Examination).
- 20% marks of internal evaluation will be added in theory of semester exam. That 20% may include class tests, assignment, journals and the modular exam which all have specific marks allocation.

Example : Number of Marks allocated for Semester Theory and Internal Evaluation			
Semester	**Semester Examination Theory Marks**	**Internal Evaluation (Class tests + Journals + Assignments + Modular Exam)**	**Total (Theory)**
	80%	**20%**	100%

Formative Assessment

- Individual department may hold quiz or short answer questions to help students assess their own learning. The marks obtained are not included in the internal evaluation



SEMESTER EXAMINATION RULES & REGULATIONS OF JINNAH SINDH MEDICAL UNIVERSITY (JSMU)

- In one academic year there will be two semesters. The semester duration is approximately sixteen weeks.
- Each semester may have two to three modules from two to eight weeks duration.

JSMU EXAMINATIONS:

- **JSMU** will schedule and hold Semester Examinations on completion of each semester.
- In one academic year, there will be two semester examinations and one Retake Examination.

MBBS Second year:

- **Semester III examination** is scheduled on completion of Head & Neck, Neurosciences and Endocrine module.
- **Semester IV Examination** is scheduled on completion of GIT & Liver, Renal and Reproductive system module.

Examination Protocols:

- In each semester, module will be assessed by theory paper comprising MCQs and EMQs. For example, semester 2 will have separate paper for Head & Neck, Neurosciences and Endocrinology.
- There will be one OSPE (Objective Structured Practical Examination) which will cover all the modules of semester 3.

1. Theory (Knowledge)

- Theory paper will comprise of 80 one best type MCQs and 20 EMQs.
- Time duration for theory paper will be 120 minutes.
- Students will mark their responses on JSMU specified response sheets assessed by computer software.
- It will carry out 80% contribution in theory results of the Semester.
- There is no negative marking.

2. OSPE:

- It is held at the respective college unless specified by JSMU.
- It may comprise between 12- 25 stations. Each station will carry 10 marks.
- All students begin and end at the same time.
- The content assessed is the same for all students.
- The time allocated for each station is the same.

3. JSMU Grading System

- It will be based on GPA – 4 system

Marks obtained in Percentage range	Numerical Grade	Alphabetical Grade
80-100	4.0	**A+**
75-79	4.0	**A**
70-74	3.7	**A-**
67-69	3.3	**B+**
63-66	3.0	**B**
60-62	2.7	**B-**
56-59	2.3	**C+**
50-55	2.0	**C**
<50 Un-grade-able	0	**U**

- A candidate obtaining GPA less than 2.00 (50%) is declared un-graded (fail).
- Cumulative transcript is issued at the end of clearance of **all** modules.

4. Retake Examination

- The failures are to re-appear in subsequent examinations.
- It is held once a year that is after the **even** number semesters. For example at the end of second, fourth, sixth, eighth or tenth semester.
- Retake examinations are for those students who fail in semester examinations, **and** who wish to improve grades (GPA) secured in semester examinations.
- The candidate who has passed the semester examinations with GPA less than 3.0 GPA may re-appear in respective retake examination to improve grades.
- MBBS **first year** Candidates failing in retake examinations may re-appear in semesters' examinations of the following year. The format is exactly the same as in semester examinations.

EXAMPLE OF PROMOTION RULES:

A student who fails in Semester One Examination and passes Semester Two, s/he will take Retake for Semester One Examination. S/he passes Semester one retake and is promoted to 2nd year. If that student FAILS in Retake, s/he will be promoted to 2nd year BUT will have to Pass Semester One examination in Second year along with Semester Three and Four examinations for promotion to third year.

5. Promotion to next class

- Students who pass both semester examinations are promoted from first year to second year.
- Students who fail the MBBS first year semester retake examination will be promoted to second year.
- Students will be promoted from **second year to third year and onward only** if they have passed the semester examinations of that year.
- Clearance of all modules and their components of semester one to four are mandatory for promotion from second year to third year (as per PMDC rules).
- As per PMDC rules any candidate failing to clear a module or its component in four (1+3) attempts is **NOT** allowed to carry out further medical education.
- To pass all modules and their components of semester/s are mandatory for promotion from third year onward.

MODULE 1 : HEAD & NECK

INTRODUCTION

The head and neck module (HNM) for 2nd year MBBS aims to integrate both basic and clinical sciences. In basic sciences, students will be able to explain developmental, gross and microscopic anatomy of the head, neck, eyes, and ears along with relevant neurophysiology, pathology and biochemistry. Integration with relevant clinical sciences disciplines will help students apply their knowledge from a meaningful clinical perspective. Thus the role of basic sciences is to introduce and explain the function of these systems for students who will relate to the diseases affecting these regions, for diagnosis and management. Community Medicine will cover the preventive and epidemiological aspects related to head and neck.

Environmental issues like air pollution, noise pollution and hospital waste will be discussed for students' comprehensive understanding. Students will experience case-based sessions (CBLs), small group discussions, lectures, practicals, demonstrations, visit towards and laboratory.

COURSE OBJECTIVES AND STRATEGIES

At the end of the module the students will be able to:

OUTCOMES & OBJECTIVES	FACULTY	LEARNING STRATEGY
1. Bony features of skull		
a. Describe bony features of skull with reference to its norma, vault and base of skull with clinical importance	Anatomy	Small Group Discussion
b. Discuss the fractures of skull and its types	Anatomy	CBL
2. Importance of scalp		
a. Describe scalp and superficial temporal region with their muscles, neurovascular supply and clinical importance	Anatomy	Small Group Discussion
3. Clinical anatomy & neurovascular supply of face		
a. Discuss muscles and clinical importance & neurovascular supply of face in relation to facial palsy.	Anatomy	Small Group Discussion
a. Describe the extracranial pathway of Trigeminal and Facial nerve with clinical importance		Case-Based Learning
4. Development and congenital anomalies of pharyngeal arches, pouches, face and tongue		
a. Describe the development of head and neck (pharyngeal apparatus) and their congenital anomalies	Anatomy	Interactive Lecture
b. Describe the development of face and palate with congenital anomalies		Interactive Lecture
5. Development, anatomy and contents of orbit		
a. Describe the development of eye and associated congenital anomalies	Anatomy	Lecture
b. Describe the boundaries of orbital cavity		Small Group Discussion
c. List the contents and structures that pass through different openings of orbit		
d. Explain the gross anatomical features of eyeball with its neurovascular supply and lymphatic		Small Group Discussion/Case-Based

drainage		Learning
e. Describe the extra-ocular muscles with attachments, movements, nerve supply & clinical importance		
f. Describe the clinical importance of Optic, Oculomotor, Trochlear and Abducence nerve		
6. Formation, circulation and blockage of aqueous humor		
• **Blockage of drainage (Glaucoma)** a. Discuss the Anatomy of angle, production and drainage of Aqueous	Eye	Lecture
b. Discuss the causes and types of glaucoma along with its signs and symptoms		
c. Explain the line of management of glaucoma		
7. Errors of refraction, disorders of optical system at different levels including cataract		
• **Errors of Refraction** a. Explain the types of refractive error which include Myopia, Hyperopia, Astigmatism and compound	Eye	Lecture
b. Discuss the optical system of eye including role of cornea and lens with reference to ray diagram		
c. Discuss the structure of cornea and Lens along with the reason of their transparency, that is concept of media clarity		
d. Discuss the concept of accommodation		
• **Cataract** a. List the causes of cataract	Eye	
b. Classify cataract		
c. Discuss the congenital and acquired disorder of lenses		
d. Discuss the management of cataract		
8. Visual acuity and perimetry		
a. Describe the physiology of vision	Physiology	Lecture/ Small Group

b. Enlist layers of retina and photochemistry of eye		Discussion /Practical
c. Explain image forming mechanism and accommodation		
d. Describe errors of refraction		Lecture/ Small Group Discussion /Practical
e. Explain visual acuity and color vision		
9. Histology of eyeball		
a. Discuss the microscopic features of eyeball	Anatomy	Small Group Discussion
10. Process of optics of vision and photoreception pathway		
a. Describe photo transduction/electro-tonic conduction	Physiology	Lecture/ Small Group Discussion /Practical
b. Explain visual pathway and its lesions		
c. Describe visual cortex along with primary and secondary visual areas		
11. Visual field defects		
a. Discuss the visual system and vision along with its assessment	Eye	Lecture
b. Describe the anatomy of visual pathway		
c. Explain the lesion at different level of pathways and types of field defects		
d. List the causes of damage to visual pathway		
e. Discuss the line of management of visual pathway lesions		
12. Biochemical aspects of nutrition, importance of macro & micronutrients and associated diseases		
a. Discuss the importance of micronutrients including an overview of Vitamins	Biochemistry	Small Group Discussion & Lectures
b. Discuss the biochemical role of Vitamin A and its role in vision (Visual cycle)		
c. Describe biochemical aspects of nutrition and balanced diet (carbohydrates, Protein and Lipids)		

d. Correlate BMI and RDA with nutrition and diet		
e. Discuss the role of minerals in balanced diet		
f. Discuss the importance of carbohydrates in diet (glycemic index and its biomedical importance)		
g. Discuss the importance of proteins in a balanced diet		
h. Discuss the disorders caused by protein deficiency (PCEM, PEM and Edema)		
i. Discuss the importance of dietary Lipids and its role in obesity, metabolic syndrome and other disorders		
13. Eyelids, Conjunctiva and Lacrimal apparatus		
a. Discuss the gross anatomical structure of Eyelids, Conjunctiva and Lacrimal apparatus.	Anatomy	Small Group Discussion
14. Temporal region		
a. Identify the bony features of mandible and hyoid bone with their muscular attachments	Anatomy	Small Group Discussion
b. Discuss the temporomandibular joint with its neurovascular supply and movements		
c. Discuss the boundaries and contents of pterygopalatine, temporal and infratemporal fossae		
15. Development, gross and histological features of ear		
a. Describe the development of ear with its congenital anomalies	Anatomy	Lecture
b. Describe the gross anatomy and microscopic features of external, middle and internal ear		Small Group Discussion
c. Describe functions of various parts of ear	Physiology	Lecture/Small Group Discussion
d. Describe the ear discharge along with the deafness and disorders of hearing	ENT	Lecture
16. Auditory pathway and mechanism of transmission of sound		

a. Explain the mechanism of hearing	Physiology	Lecture/Small Group Discussion/Practical
b. Trace the auditory pathway and differentiate between types of deafness	Physiology	
17. Mechanism of equilibrium & balance of the body		
a. Explain role of cochlea and organ of corti	Physiology	Lecture/ Small Group Discussion
b. Describe vestibular apparatus		
c. Explain mechanism of equilibrium		
18. Development and anatomical features of nose and sinuses		
a. Describe the development of nose with its congenital anomalies	Anatomy	Lecture
b. Describe the gross anatomy and microscopic features, neurovascular supply and lymphatic drainage of nose		Small Group Discussion/Practical
c. Discuss clinical importance of olfactory nerve		
d. Describe the clinical importance of paranasal air sinuses		Interactive Lecture
e. Discuss mechanism of olfaction	Physiology	Lecture/Small Group Discussion/ Practical
f. Correlate causes with clinical presentation of epistaxis	ENT	Lecture
19. Oral cavity and related disorders		
a. Describe the development of tongue with its congenital anomalies	Anatomy	Lecture
b. Describe the gross anatomy & microscopic features of tongue c. Describe the Hypoglossal nerve with clinical importance		Case-Based Learning/Practical
20. Development, gross and microscopic structure of salivary glands		
a. Describe the development, gross anatomical and microscopic features of salivary glands, with neurovascular supply	Anatomy	Small Group Discussion

21. Disorders of major and minor salivary glands		
a. Discuss the salivary disorders	Pathology	Small Group Discussion
b. List non- neoplastic lesions of salivary gland with etiological factors and clinical presentation	Pathology	Lecture
d. Describe reactive and infectious diseases of oral cavity	Pathology	Lecture/Small Group Discussion
22. Inflammatory, infective and reactive lesions of nasopharynx		
a. List infectious and inflammatory conditions of nasal cavity with etiological factors	Pathology	Lecture
23. Clinical significance of neck region		
a. Explain the triangles of the neck with boundaries and contents b. Identify the muscles and joints in the prevertebral region of the neck	Anatomy	Small Group Discussion
c. Describe the vessels, lymph nodes, ganglia and plexuses of the head & neck	Anatomy	
d. Describe the development of pharynx with its gross anatomical features, parts, muscles and neurovascular supply		
e. Identify the gross anatomy & microscopic features of thyroid & parathyroid glands		
f. Describe neurovascular supply & clinical importance of thyroid & parathyroid glands		
g. Discuss clinical significance of tonsils	ENT	Lecture
24. Sense of taste		
a. Describe sense of taste along with the taste pathway	Physiology	Lecture/Small Group Discussion
25. Development, structures and mechanism of phonation		
a. Describe the structure of larynx, with neurovascular supply and clinical importance	Anatomy	Small Group Discussion
b. Discuss the mechanism of phonation	Physiology	Lecture

26. Inflammatory conditions of larynx and reactive nodules of vocal cord		
a. List inflammatory and non- neoplastic conditions of Larynx	Pathology	Lecture
b. Discuss etiology and clinical presentation of vocal cord nodule		
27. Vertebrae and landmarks of the neck region		
a. Identify the features of cervical vertebrae with their attachments	Anatomy	Small Group Discussion
b. Discuss cervical fascia and cervical plexus		
28. Hazards of hospital waste, noise and air pollution on community health		
a. List the different types of the hospital wastes and discuss its management	Community Medicine	Interactive Lectures
b. Describe the sources of air pollution and its control		
c. Describe the causes of water pollution and the diseases associated with the consumption of polluted water		
d. Discuss the methods of purification of water on large and small scale		
e. Describe the examination of water with regards to physical, chemical and biological quality		
f. Explain the management of solid and liquid waste		
g. Define the noise pollution		
h. Explain the causes and hazards of noise pollution and preventive methods		
i. Describe the concept of the healthy house and its effect on the health		
29. Mental health, epidemiology and its prevention		
a. Discuss the importance of mental health along with the prevention of mental disorders	Community Medicine	Lecture

30. Nuclear Medicine		
a. Explain the hazards of radiation and its prevention	Community Medicine	Lecture
31. Environmental health		
a. Explain the concept of environmental health	Community Medicine	Lecture

LEARNING RESOURCES

SUBJECT	RESOURCES
ANATOMY	**A. GROSS ANATOMY** 1. K.L. Moore, Clinically Oriented Anatomy 2. Neuro Anatomy by Richard Snell 3. https://www.kenhub.com/en/dashboard **B. HISTOLOGY** 1. B. Young J. W. Health Wheather's Functional Histology **C. EMBRYOLOGY** 1. Keith L. Moore. The Developing Human 2. Langman's Medical Embryology
BIOCHEMISTRY	**A. TEXTBOOKS** 1. Harper's Illustrated Biochemistry 2. Lehninger Principle of Biochemistry 3. Biochemistry by Devlin
COMMUNITY MEDICINE	**A. TEXT BOOKS** 1. Community Medicine by Parikh 2. Community Medicine by M Illyas 3. Basic *Statistics* for the Health Sciences by Jan W Kuzma
PATHOLOGY/MICROBIOLOGY	**A. TEXT BOOKS** 1. Robbins & Cotran, Pathologic Basis of Disease, 9th edition. 2. Rapid Review Pathology, 4th edition by Edward F. Goljan MD 1. http://library.med.utah.edu/WebPath/webpath.html 2. http://www.pathologyatlas.ro/
PHARMACOLOGY	**A. TEXT BOOKS** 1. Lippincot Illustrated Pharmacology 2. Basic and Clinical Pharmacology by Katzung
PHYSIOLOGY	**A. TEXTBOOKS** 1. Textbook Of Medical Physiology by Guyton And Hall 2. Ganong ' S Review of Medical Physiology 3. Human Physiology by Lauralee Sherwood 4. Berne & Levy Physiology 5. Best & Taylor Physiological Basis of Medical Practice **B. REFERENCE BOOKS** 1. Guyton & Hall Physiological Review 2. Essentials Of Medical Physiology by Jaypee 3. Textbook Of Medical Physiology by InduKhurana 4. Short Textbook Of Physiology by Mrthur 5. NMS Physiology

OTHER LEARNING RESOURCES

Hands-on Activities/ Practical	Students will be involved in Practical sessions and hands-on activities related to the head & neck module to enhance the learning.
Labs	• Utilize the lab to relate the knowledge to the specimens and models available.
Skill Labs	• A skills lab provides the simulators to learn the basic skills and procedures. This helps build the confidence to approach the patients.
Videos	Video familiarize the student with the procedures and protocols to assist patients.
Computer Lab/CDs/DVDs/Internet Resources:	To increase the knowledge students should utilize the available internet resources and CDs/DVDs. This will be an additional advantage to increase learning.
Self Learning	Self Learning is scheduled to search for information to solve cases, read through different resources and discuss among the peers and with the faculty to clarify the concepts.

MODULAR EXAMINATION RULES & REGULATIONS (LNH&MC)

- Student must report to examination hall/venue, 30 minutes before the exam.
- **Exam will begin sharp at the given time.**
- No student will be allowed to enter the examination hall after 15 minutes of scheduled examination time.
- Students must sit according to their roll numbers mentioned on the seats.
- **Cell phones are strictly not allowed in examination hall.**
- If any student is found with cell phone in any mode (silent, switched off or on) he/she will be not be allowed to continue their exam.
- No students will be allowed to sit in exam without University Admit Card, LNMC College ID Card and Lab Coat
- Student must bring the following stationary items for the exam: Pen, Pencil, Eraser, and Sharpener.
- Indiscipline in the exam hall/venue is not acceptable. Students must not possess any written material or communicate with their fellow students.

SCHEDULE:

WEEKS	2nd YEAR SEMESTER 3	DATES
WEEK 1	HEAD & NECK MODULE	18th December, 2018
WEEK 2		
WEEK 3		
WEEK 4		
WEEK 5		18th January, 2018
	MODULAR EXAM	19th & 20th January, 2018*
WEEK 1	NEUROSCIENCES MODULE	22nd January, 2018*
WEEK 2		
WEEK 3		
WEEK 4		
WEEK 5		
WEEK 6		
WEEK 7		
WEEK 8		March 2018*
	MODULAR EXAM	16th & 17th March, 2018
WEEK 1	ENDOCRINOLOGY MODULE	19th March, 2018*
WEEK 2		
WEEK 3		
WEEK 4		
	MODULAR EXAM	13th & 14th April, 2018*
PREPARATORY LEAVE		
	SEMESTER EXAM	April – May 2018*

*Final dates will be announced later.