

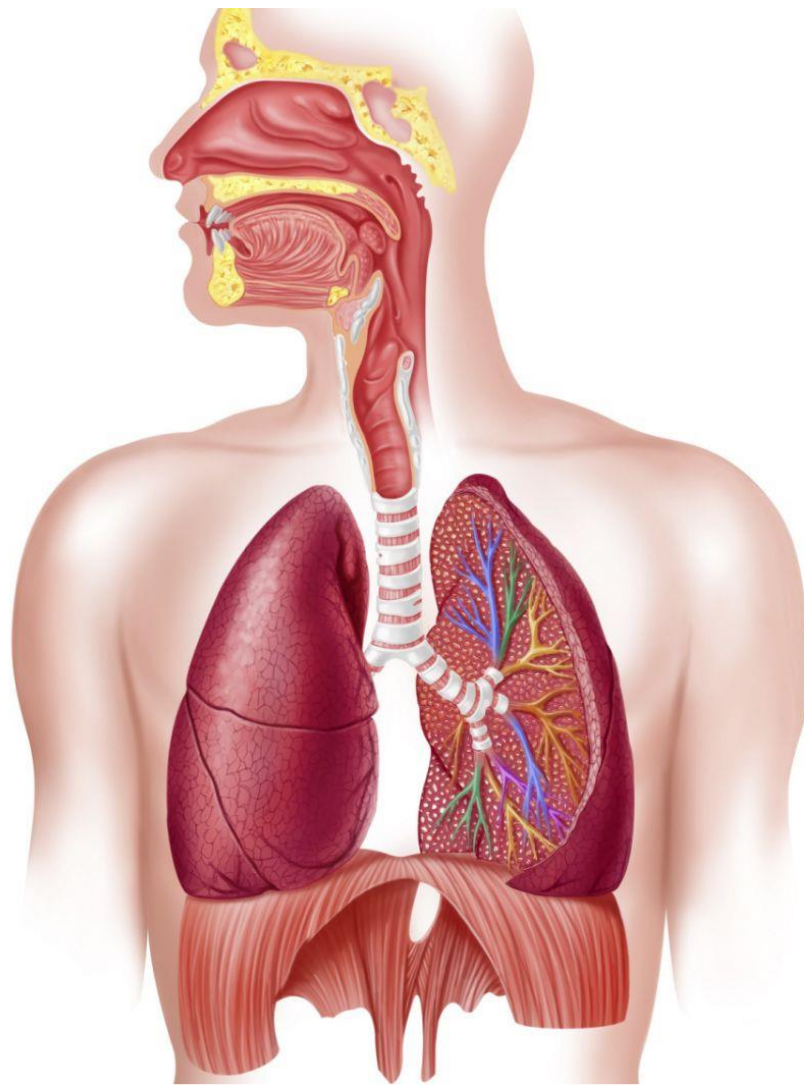


LIAQUAT NATIONAL HOSPITAL AND MEDICAL COLLEGE
Institute for Postgraduate Medical Studies & Health Science



RESPIRATORY II MODULE

21st September TO 10th October 2026



STUDY GUIDE FOR RESPIRATORY II MODULE

S. No	CONTENTS	Page No.
1	Overview	3
2	Introduction to Study Guide	4
3	Learning Methodologies	5
4	Module 4: Respiratory II	7
4.1	Introduction	7
4.2	Objectives and Strategies	8
5	Learning Resources	15
6	Assessment Methods	16
7	LNMC Examination Rules and Regulations	17
8	Schedule	18

Module name: **Respiratory II**Year: **Three**Duration: **3 weeks (Sep–Oct 2026)****MODULE INTEGRATED COMMITTEE**

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CO-COORDINATORS:	Dr. Asra Zia (DHPE)

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STUDY GUIDE COMPILED BY: <i>Department of Health Professions Education</i>		

INTRODUCTION

WHAT IS A STUDY GUIDE?

It is an aid to:

- Inform students how the student learning program of the 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 the organization and management of the module. This will help the student to contact the right person in case of any difficulty.
- Define the objectives which are expected to be achieved at the end of the module.
- Identifies the learning strategies such as Interactive Lectures, small group teachings, clinical skills, demonstrations, tutorials, and case-based learning that will be implemented to achieve the module objectives.
- Provide a list of learning resources such as books, computer- assisted learning programs, web- links, and journals, for students to consult to maximize their learning.
- Highlights information on the contribution of continuous and module 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 about examination policy, rules, and regulations.

CURRICULUM FRAMEWORK

Students will experience an integrated curriculum.

INTEGRATED CURRICULUM comprises system-based modules such as the Locomotor system, Respiratory System, and Cardiovascular system 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 a better understanding of basic sciences when they repeatedly learn concerning clinical examples.

Case-based discussions, computer-based assignments, early exposure to clinics, wards, and skills acquisition in skills lab are characteristics of integrated teaching programs.

LEARNING METHODOLOGIES

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

- Interactive Lectures
- Tutorial
- Case- Based Learning (CBL)
- Clinical Experiences
 - Clinical Rotations
- Skills session
- Self-Directed Learning

INTERACTIVE LECTURES: In a large group, the Interactive Lectures introduce 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.

TUTORIAL: This format helps students to clarify concepts, and acquire skills or desired attitudes. Sessions are structured with the help of specific exercises such as patient cases, interviews, or discussion topics. Students exchange opinions and apply knowledge gained from Interactive Lectures, tutorials, and self-study. The facilitator's role is to ask probing questions, summarize, or rephrase to help clarify concepts.

CASE-BASED LEARNING (CBL): A small group discussion format where learning is focused on a series of questions based on a clinical scenario. Students discuss and answer the questions by applying relevant knowledge gained previously in clinical and basic health sciences during the module and constructing new knowledge. The CBL will be provided by the concerned department

CLINICAL LEARNING EXPERIENCES: In small groups, students observe patients with signs and symptoms in hospital wards, clinics, and outreach centers. This helps students to relate knowledge of basic and clinical sciences of the module and prepare for future practice.

- **CLINICAL ROTATIONS:** In small groups, students rotate in different wards like Medicine, Pediatrics, Surgery, Obs, and, Gyne, ENT, Eye, Family Medicine clinics, outreach centers & Community Medicine experiences. Here students observe patients, take histories and perform supervised clinical examinations in outpatient and inpatient settings. They also get an opportunity to observe medical personnel working as a team. These rotations help students relate basic medical and clinical knowledge in diverse clinical areas.

SKILLS SESSION: Skills relevant to the respective module are observed and practiced where applicable in the skills laboratory.

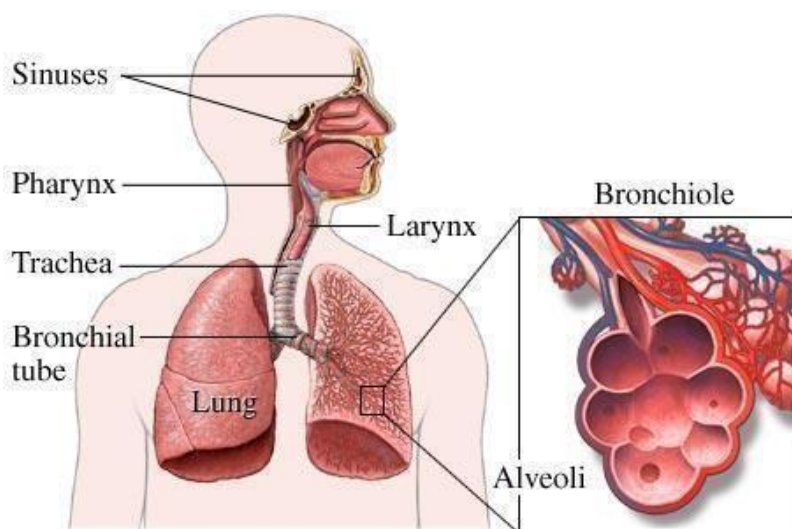
SELF-DIRECTED LEARNING Students assume responsibilities for their learning through individual study, sharing and discussing with peers, and seeking information from Learning Resource Center, teachers, and resource persons within and outside the college. Students can utilize the time within the college's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

MODULE 4: RESPIRATORY II**RATIONALE**

The Respiratory System II (RES II) module is designed to consolidate, and build on the First year Respiratory I module which covered basic medical sciences concepts for understanding the causes and treatment of diseases.

Tuberculosis is considered to be a major cause of ill health in Pakistan. The annual incidence rate of infectious Tuberculosis cases is estimated to be between 85-100/100,000 persons.¹The exact prevalence of COPD in Pakistan is not known, but a large number of patients attend outpatient and emergency departments across most of the country. The socio economic burden of COPD is considerable. A part from smoking, urban air pollution is an important cause of COPD.²Pakistan at present falls in to a low risk lung cancer region in females and a moderate risk region for males and the highest registered increase between 1995 and 2002 was observed in the older age groups (65+).³

RES (II) will focus on the respiratory system, its associated diseases, treatment options, and prevention of the diseases such as obstructive lung diseases, hypersensitivity related diseases, pulmonary infections, respiratory failure and restrictive lung diseases. The community medicine learning will aim at sessions on preventive medicine and various program such as TB, DOTS and National tuberculosis control program of Pakistan. The module will enable students to relate their theoretical knowledge to real practice through common clinical presentations, case-based discussions, interactive lectures, patient interactions and simulated-based learning.



COURSE OBJECTIVES AND STRATEGIES

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

COMMUNITY MEDICINE

TOPICS & OBJECTIVES	LEARNING STRATEGIES
1. Introduction to Occupational health & Diseases	Tutorial
• Describe occupational health	
• Classify occupational health diseases	
• Discuss measures for prevention and control of occupational health diseases	
• Describe Lead poisoning	
2. Pneumoconioses and its prevention	
• Define pneumoconioses	
• List pneumoconioses diseases	
• Discuss the control and prevention of pneumoconioses	
3. Pulmonary tuberculosis and its prevention	
• Discuss the causative organism of tuberculosis	
• Explain why Tuberculosis remains a world-wide problem	
• List Epidemiological Indices of tuberculosis	
• Explain TB-DOTS Therapy	
• Discuss Tuberculosis situation in Pakistan	
• Discuss the control and prevention of tuberculosis	
4. Asthma and its prevention	Interactive Lecture
• Describe Asthma	
• Explain the clinical features & diagnosis criteria of Asthma	
• Discuss the control and prevention of Asthma	
5. Chicken pox and its prevention	
• Describe Chicken pox disease	
• Describe the epidemiology, clinical features and diagnosis criteria of Chicken pox	
• Discuss the control and prevention of Chicken pox	
6. Influenza and its prevention	
• Describe influenza	
• Discuss the history of Spanish flu pandemic	
• Describe the epidemiology, clinical features and diagnosis criteria of influenza	
• Discuss the control and prevention of influenza	
7. Diphtheria and its prevention	
• Discuss the epidemiology of Diphtheria	
• Explain the risk factors, consequences & clinical features of Diphtheria	
• Discuss the control and prevention of Diphtheria	
8. Measles and its prevention	
• Describe the etiology, epidemiology and clinical features of measles	

• Explain the diagnostic criteria of measles	
• Discuss the control and prevention of measles	
9. Pertussis and its prevention	
• Describe the etiology, epidemiology and clinical features of pertussis	
• Explain the diagnostic criteria of pertussis	
sedative• Discuss the control and prevention of pertussis	
10. Air Pollution	
• Discuss the situation of air pollution	
• List the sources of air pollution	
• Explain the effects of air pollution on health	
• Discuss the concept of greenhouse effects	
• Describe the concept of global warming and ozone depletion	
• Discuss the methods to control air pollution	
11. Pneumonia, SARS & COVID-19	Tutorial
• Define pneumonia	
• Classify different types of pneumonia	
• Explain the mode of transmission and predisposing factors of pneumonia	
• Describe the measures for control and prevention of Pneumonia and SARS	
• Describe COVID-19	
• Discuss the epidemiology of COVID-19	
• Explain clinical features of COVID-19	Interactive Lecture
• Describe the measures for control and prevention of COVID-19	
12. Tobacco Control	
• Discuss the health effects of Tobacco	
• List the objectives of Tobacco Free Initiative of Pakistan	
• Define passive smoking and pack years classification of Smoking	
• Describe the model of behavior change for Smoking	
• Cessation and MPOWER strategy of tobacco control	
• Discuss WHO's "Tobacco- Free Initiative"	

FORENSIC MEDICINE

TOPICS & OBJECTIVES	LEARNING STRATEGIES
1. Asphyxia I	Interactive
• Define asphyxia	
• Summarize the etiology, pathophysiology and classic signs of asphyxia	
• Enumerate the different types of asphyxia and violent asphyxial deaths	
• Classify tissue anoxia according to Gordon's classification	
• List the different types of hanging	
• Explain the autopsy findings and medicolegal importance of hanging	
• Differentiate between ante-mortem and post-mortem hanging	
2. Asphyxia II	

Diagnose strangulation, throttling, suffocation, smothering, gagging and choking based on scenarios	Lecture
Discuss the mechanism, diagnostic features, and autopsy findings of traumatic asphyxia	
3. Asphyxia III	
Define the types, mechanism and postmortem findings of drowning	
Describe the causes of death due to drowning	
Highlight the importance of diatoms in deaths by drowning	
Define Sexual asphyxia (auto-erotic hanging)	
4. Toxicology– Organophosphate insecticides poisoning	
List commonly used insecticides	
Classify organophosphate compounds	
Describe the mode of action, signs and symptoms, treatment, postmortem findings and medico legal importance of organophosphate and Carbamate poisoning	
5. Toxicology- Chloro group of insecticides (D.D.T.)	
Describe the mode of action, signs, symptoms, treatment and postmortem findings of DDT Poisoning	
6. Spinal Poisons	Tutorial
Describe the mode of action, signs and symptoms, treatment, postmortem findings and medico legal aspects of poisoning by Strychnine and other spinal poisons	
7. Barbiturates and tranquilizers	Interactive Lecture
Describe the mode of action, signs and symptoms depending upon concentration in blood, treatment and postmortem findings of poisoning by Barbiturates and tranquilizers (therapeutic poisons)	
8. Toxicology- Irrespirable /Asphyxiants gases I (CO₂ & Sewer gas poisoning)	Tutorial
Describe the mode of action, signs and symptoms, treatment, postmortem findings and medico legal aspects of CO₂ & sewer gas poisoning	
9. Toxicology- Irrespirable/Asphyxiants gases II (Carbon monoxide, Hydrogen sulphide and War gases poisoning)	
List the sources of Carbon monoxide	
Describe the mode of action, signs and symptoms, treatment, postmortem findings and medico legal aspects of Carbon monoxide and hydrogen Sulphide poisoning	
Classify war gases	
Describe lacrimators and their treatment	
10. Toxicology-Aluminum Phosphide & Paraquat poisoning	
List the sources of Aluminum phosphide and Paraquat	
Describe the mode of action, signs, symptoms, treatment, postmortem findings and medico legal aspects of Aluminum phosphide and Paraquat poisoning	
11. Toxicology Naphthalene Poisoning	
Describe the mode of action, signs, symptoms, treatment, postmortem findings and medico legal aspects of Naphthalene poisoning	

PATHOLOGY

TOPICS & OBJECTIVES	LEARNING STRATEGIES
1. Congenital Anomalies of respiratory system, Atelectasis, Pulmonary edema	Interactive Lecture
• Define Atelectasis and Pulmonary edema	
• List the types of congenital anomalies, Atelectasis and Pulmonary edema	
• Describe the embryologic pathology, microscopic and clinical features of Congenital anomalies of Respiratory system	
• Discuss the classification, pathogenesis, morphology, causes and clinical features of Atelectasis and Pulmonary edema	
• Differentiate between pathogenesis of hemodynamic and micro vascular alveolar injury	
2. Acute lung injury (ALI) and acute respiratory distress syndrome (ARDS)	Interactive Lecture
• Define ARDS and ALI	
• List the conditions associated with development of ARDS	
• Discuss pathogenesis, morphological and clinical features of ARDS / ALI	
3. Obstructive lung diseases I (emphysema, chronic bronchitis)	
• Define emphysema and chronic bronchitis	
• Classify emphysema	
• Describe the various clinical forms of emphysema.	
• Discuss the etiology, pathogenesis, morphology and clinical features of emphysema and chronic bronchitis	
4. Obstructive lung diseases II (asthma, and bronchiectasis)	
• Define asthma and bronchiectasis	
• Classify asthma	
• List the causes of asthma and bronchiectasis	
• Discuss the etiology, pathogenesis, morphology and clinical features of asthma and bronchiectasis	
5. Chronic Interstitial restrictive lung diseases	
• Define restrictive diseases of lung (idiopathic pulmonary fibrosis, Nonspecific Interstitial Pneumonia, Cryptogenic Organizing Pneumonia, pneumoconioses and Pulmonary Involvement in Autoimmune Diseases)	
• Classify restrictive diseases of lung	
• Discuss the etiopathogenesis, morphology and clinical features of Chronic Interstitial restrictive lung diseases (idiopathic pulmonary fibrosis, Nonspecific Interstitial Pneumonia, Cryptogenic Organizing Pneumonia, pneumoconioses and Pulmonary Involvement in Autoimmune Diseases)	
6. Pneumoconioses	
• Define Pneumoconioses	
• List the causative agents of Pneumoconioses	
• Discuss the pathogenesis, morphology and clinical features of Pneumoconioses	
7. Granulomatous diseases (Sarcoidosis, hypersensitivity pneumonitis, pulmonary eosinophilia, Smoking related interstitial diseases)	
• Define granulomatous diseases (Sarcoidosis)	

Classify granulomatous diseases (Sarcoidosis)	Interactive Lecture
Discuss the pathogenesis, morphology and clinical features of Granulomatous diseases	
8. Pulmonary Infections (Pneumonia)	
Define pneumonia	
Classify pneumonia. (community acquired pneumonia, hospital acquired pneumonia, healthcare associated pneumonia, aspiration pneumonia, chronic pneumonia, necrotizing pneumonia and pneumonia in the immunocompromised host)	
Discuss the morphology, pathogenesis, clinical features and diagnosis of Pulmonary Infections (Pneumonia)	
Discuss briefly aspiration pneumonia and lung abscess	
9. Pulmonary tuberculosis	
Define Pulmonary tuberculosis	
Discuss the morphology, pathogenesis, clinical features (primary, secondary latent and miliary) laboratory investigations of pulmonary tuberculosis	
10. Lung Tumor I	Interactive Lecture
Classify broadly the lung tumors	
Describe the histological classification of malignant epithelial lung tumors	
Discuss the precursor(pre-invasive) lesions of lung carcinoma	
Discuss the risk factors, pathogenesis, molecular profile and morphology of lung carcinoma	
11. Lung Tumor II	
Discuss the international staging (TNM) for lung cancer.	
Discuss the local effects (Secondary Pathology) and clinical course of lung tumor spread.	
Discuss the pathogenesis, morphology and clinical features of neuroendocrine neoplasm of lung (Carcinoid tumor).	
List the Mesenchymal tumors of lung.	Interactive Lecture/ Tutorial
Briefly discuss hamartoma of lung and metastatic tumors of lung.	
12. Pleural pathology (pleural effusion, Pneumothorax, pleural tumors)	
Discuss briefly pleural effusion and pneumothorax	Interactive Lecture
Discuss the pathogenesis, morphology and clinical course of pleural tumors	
13. Pulmonary vascular diseases	
Define pulmonary vascular diseases (pulmonary embolisms, hemorrhage, infarction, hypertension and diffuse pulmonary hemorrhage syndrome)	Practical
List the risk factors of pulmonary vascular disease	
Discuss the pathogenesis, morphology and clinical features of pulmonary vascular disease	
14. Histopathology of Chronic Obstructive Pulmonary Disease (COPD)	
Discuss the histopathology of Chronic Obstructive Pulmonary Disease	
15. Histopathology of pneumonia	
Discuss the etiology and morphology of pneumonia.	
16. Histopathology of Pulmonary Tuberculosis	
Discuss detailed morphology and pathogenesis of Pulmonary Tuberculosis	
17. Pathology of lung tumors	
Discuss the etiology, morphology and manifestations of lung tumors.	Practical
18. Types of Hemolysis	
Discuss the types of hemolysis on blood agar	
19. Acid Fast Staining	

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| <ul style="list-style-type: none">• Discuss the principle, procedure and result of acid fast staining | |
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MICROBIOLOGY

TOPICS & OBJECTIVES	LEARNING STRATEGIES
1. Classification of streptococci and Streptococcus Pneumoniae	Interactive Lecture
Discuss the classification of streptococci and important properties, transmission, epidemiology, & pathogenesis of Streptococcus pneumoniae	
Describe clinical findings and laboratory diagnosis of Streptococcus pneumoniae infection	
Discuss treatment and prevention of Streptococcus pneumoniae infection	
2. Fungi Causing Pneumonia (Coccidioides, Histoplasma, Blastomyces, Paracoccidioides, Aspergillus, Pneumocystis, Mucor and Rhizopus)	
Discuss the properties of fungi causing systemic fungal diseases	
Discuss the process of transmission, pathogenesis, and clinical findings of these fungal infections	
Discuss the epidemiology of these fungal infections	
Discuss the laboratory diagnosis, treatment and prevention of fungi causing pneumonia	
3. Mycobacterium Tuberculosis	Interactive Lecture
Discuss the important properties, transmission, epidemiology, & pathogenesis of Mycobacterium Tuberculosis and Mycobacterium Leprae	
Describe clinical findings and laboratory diagnosis of M. Tuberculosis and M. Leprae	
Discuss treatment and prevention of M. Tuberculosis and M. Leprae	
4. Mycobacterium Leprae and Atypical Mycobacteria	
Discuss the important properties, transmission, epidemiology, & pathogenesis of Mycobacterium Leprae	
Describe clinical findings and laboratory diagnosis of M. Leprae	
Discuss treatment and prevention of M. Leprae	
Describe briefly Atypical Mycobacteria	
5. Gram positive rods ((Corynebacterium diphtheriae and Listeria monocytogenes, Bacillus and Clostridium)	
Discuss the important properties, transmission, epidemiology, & pathogenesis of (Corynebacterium diphtheriae and Listeria monocytogenes, Bacillus and Clostridium)	
Describe the clinical findings and laboratory diagnosis of infections caused by these bacteria	
Discuss treatment and prevention of Corynebacterium diphtheriae and Listeria monocytogenes, Bacillus and clostridium	
6. Gram negative rods (Haemophilus, Bordetella, Legionella)	
Discuss the important properties, transmission, epidemiology, & pathogenesis of Gram negative rods	
Describe clinical findings and laboratory diagnosis of Gram negative rods	
Discuss treatment and prevention of Gram negative rods	
7. Respiratory viruses (Influenza and Parainfluenza, Respiratory Syncytial virus Coxsackie, Adenoviruses, SARS AND SARS II COVID 19)	
Discuss the important properties, transmission, epidemiology, & pathogenesis of respiratory virus.	

• Describe replication cycle, clinical findings and laboratory diagnosis of respiratory virus	Interactive Lecture
• Discuss treatment and prevention of respiratory virus	
• Discuss SARS & SARS II (COVID 19)	
8. Childhood viruses (Measles, Mumps, Rubella)	
• Discuss the important properties, transmission, epidemiology, & pathogenesis of childhood viruses	
• Describe replication cycle, clinical findings and laboratory diagnosis of childhood viruses	
• Discuss treatment and prevention of childhood viruses	
9. Respiratory viruses I	
• Discuss the important properties, transmission, epidemiology, & pathogenesis of Influenza and Parainfluenza, Respiratory Syncytial virus.	
• Describe replication cycle, clinical findings and laboratory diagnosis of respiratory virus	
10. Respiratory viruses II	Interactive Lecture
• Discuss the important properties, transmission, epidemiology, & pathogenesis of Adenovirus, Coronavirus, Rhinovirus Describe replication cycle, clinical findings and laboratory Diagnosis of these respiratory viruses.	
11. Bacteria causing atypical pneumonia (nocardia, actinomycetes and mycoplasma)	
• Define atypical pneumonia	
• Discuss the important properties, pathogenesis of Actinomycetes and Mycoplasma	
• Describe clinical findings and laboratory diagnosis of Actinomycetes and Mycoplasma	
• Discuss treatment and prevention of Actinomycetes and Mycoplasma	

PHARMACOLOGY

TOPICS & OBJECTIVES	LEARNING STRATEGIES
1. Drugs used in the treatment of Bronchial Asthma & COPD	Interactive Lecture/ Tutorial
• Classify drugs used in the treatment and prevention of bronchial asthma and COPD	
• Discuss the treatment of bronchial asthma and COPD.	
• Discuss the basic and clinical pharmacology of drugs used in the treatment of bronchial asthma	
2. Drug used in the treatment of Tuberculosis and Leprosy	
• Classify anti-tuberculosis and anti-leprosy drugs	
• Discuss the therapeutic classification of Anti-Tuberculosis Therapy (ATT) according to WHO	
• Describe mode of action, toxicity and contraindications of ATT	
• Describe the drugs used in multi-drug resistant tuberculosis	
• Explain the drug management of extensive multi-drug resistant tuberculosis	
• Describe the mode of action, pharmacokinetics, toxicity, contraindications and drug-drug interactions of anti-leprosy drugs	
• Discuss anti-tuberculosis and anti-leprosy drugs with regards to their basic and clinical pharmacology	
3. Histamine & Anti-Histamines	
• Discuss the properties and role of histamine	
• Classify anti-histamines	
• Discuss their basic & clinical pharmacology	
4. Anti-Tussives & Mucolytics (Expectorants)	Practical
• Describe the anti-tussives & mucolytic drugs	
• Discuss their basic and clinical pharmacology	
• Explain the role of anti-tussives and mucolytic drugs in respiratory tract diseases.	
• Discuss the basic and clinical pharmacology of anti-tussives and mucolytic drugs	
5. Methods of Administration of drugs in treatment of bronchial Asthma	
• Demonstrate the different methods of administration of drugs used in the treatment of bronchial asthma	
• Discuss their clinical importance	
6. Effects of Histamine and Anti-histamine/Salbutamol on isolated trachea of Rabbit	
• Demonstrate the pharmacological action of histamine and anti-histamine drugs on isolated trachea of Rabbit	
• Compare these actions with Salbutamol by using Power Lab System	

CHEST MEDICINE

TOPICS & OBJECTIVES	LEARNING STRATEGIES
1. Asthma	Interactive Lecture
Describe the clinical features, differential diagnosis, complications, grading and investigations for Asthma	
Discuss the emergency and long-term treatment of Asthma	
2. Chronic Obstructive Pulmonary Disease	
Describe the etiology, clinical features, investigations for Chronic Bronchitis and Emphysema	
Discuss the treatment plan for each of these conditions	
3. Pneumonia	
Classify Pneumonia	
Explain the etiology, clinical features, investigations for the various types of pneumonia	
Discuss the treatment plan for each of these conditions	
4. Tuberculosis	
Classify Tuberculosis	
Describe the etiology, clinical features and investigations for Tuberculosis	

THORARCIC SURGERY

TOPICS & OBJECTIVES	LEARNING STRATEGY
1. Acid Base Balance	Interactive Lecture
Diagnose common acid-base disturbances in the surgical context	
Discuss the underlying pathophysiology of each type of disturbance	
Develop outline of management plan for each disturbance	
2. Benign diseases of lungs	
Classify benign lung diseases in the surgical context	
Discuss the pathophysiology of the condition	
Develop outline of management plan for each	
3. Benign Tumors of Thorax	
Classify benign tumors of thorax	
Discuss the pathophysiology of the conditions	
Develop outline of management plan for each	
Discuss the prognosis of each condition	

RESEARCH & SKILLS DEVELOPMENT CENTER

TOPICS & OBJECTIVES	
• Explain the components of manuscript including discussion and limitations	Interactive Lecture
• Explain the Principles of report writing	
• Discuss methods to conduct critical analysis of Research paper	

LEARNING RESOURCES

SUBJECT	RESOURCES
COMMUNITY MEDICINE	TEXT BOOKS - Community Medicine by Parikh - Community Medicine by M Illyas - Basic <i>Statistics</i> for the Health Sciences by Jan W Kuzma
FORENSIC MEDICINE	TEXT BOOKS - NasibR.Awan.Principles and practice ofForensic Medicine 1st ed. 2002. - Parikh, C.K.Parikh'sTextbook of Medical Jurisprudence, Forensic Medicine and Toxicology. 7th ed.2005. REFERENCE BOOKS - Knight B. Simpson's Forensic Medicine. 11thed.1993. - KnightandPekka.Principlesofforensicmedicine.3rded.2004 - KrishanVIJ.Text book of forensic medicine and toxicology (principles and practice). 4th ed. 2007 - Dikshit P.C. Textbook of forensicmedicine and toxicology. 1st ed. 2010 - Polson.Polson'sEssentialofForensicMedicine.4thedition. 2010. - Rao. Atlas of Forensic Medicine (latest edition). - Rao. Practical Forensic Medicine 3rd ed ,2007. - Knight:Jimpson'sForensicMedicine10th1991,11thed.1993 - Taylor's Principles and Practice of Medical Jurisprudence. 15th ed.1999 CDs: - Lectures on Forensic Medicine. - Atlas of Forensic Medicine. WEBSITES: www.forensicmedicine.co.uk
PATHOLOGY/MICROBIOLOGY	TEXT BOOKS - Robbins & Cotran, Pathologic Basis of Disease, 9th edition. - Rapid Review Pathology, 4th editionby Edward F.Goljan MD WEBSITES: http://library.med.utah.edu/WebPath/webpath.html http://www.pathologyatlas.ro/
PHARMACOLOGY	TEXT BOOKS - Lippincot Illustrated Pharmacology - Basic and Clinical Pharmacology by Katzung

ASSESSMENT METHODS:

- MCQs (Multiple Choice Questions)
- Objective Structured Practical/Clinical Examination (OSPE or OSCE)
- MCQs and unobserved OSPE will be conducted on the LNH&MC Moodle platform
- Observed OSPE will constitute multiple examiner-based stations

Internal Evaluation

- Students will be assessed comprehensively through multiple methods.
- 20% marks of internal evaluation will be added to JSMU final exam. That 20% includes mid-module & end of module examinations, mid-term & pre-professional examinations.

Formative Assessment

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

For JSMU Examination Policy, please consult JSMU website!

More than 75% attendance is needed to sit for the internal and final examinations



LNMC EXAMINATION RULES & REGULATIONS

- Students must report to the examination hall/venue, 30 minutes before the exam.
- The exam will begin sharply at the given time.
- No student will be allowed to enter the examination hall after 15 minutes of the scheduled examination time.
- Students must sit according to their roll numbers mentioned on the seats.
- Cell phones are strictly not allowed in the examination hall.
- If any student is found with a cell phone in any mode (silent, switched off, or on) he/she will not be allowed to continue their exam.
- No students will be allowed to sit in exams without University Admit Card, LNMC College ID Card, and Lab Coat.
- Students 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	3 RD YEAR	MONTH
3 WEEKS	RESPIRATORY II MODULE	21 st September 2026
		10 th October 2026
3 WEEKS	GIT II MODULE	12 th October 2026
		4 th November 2026