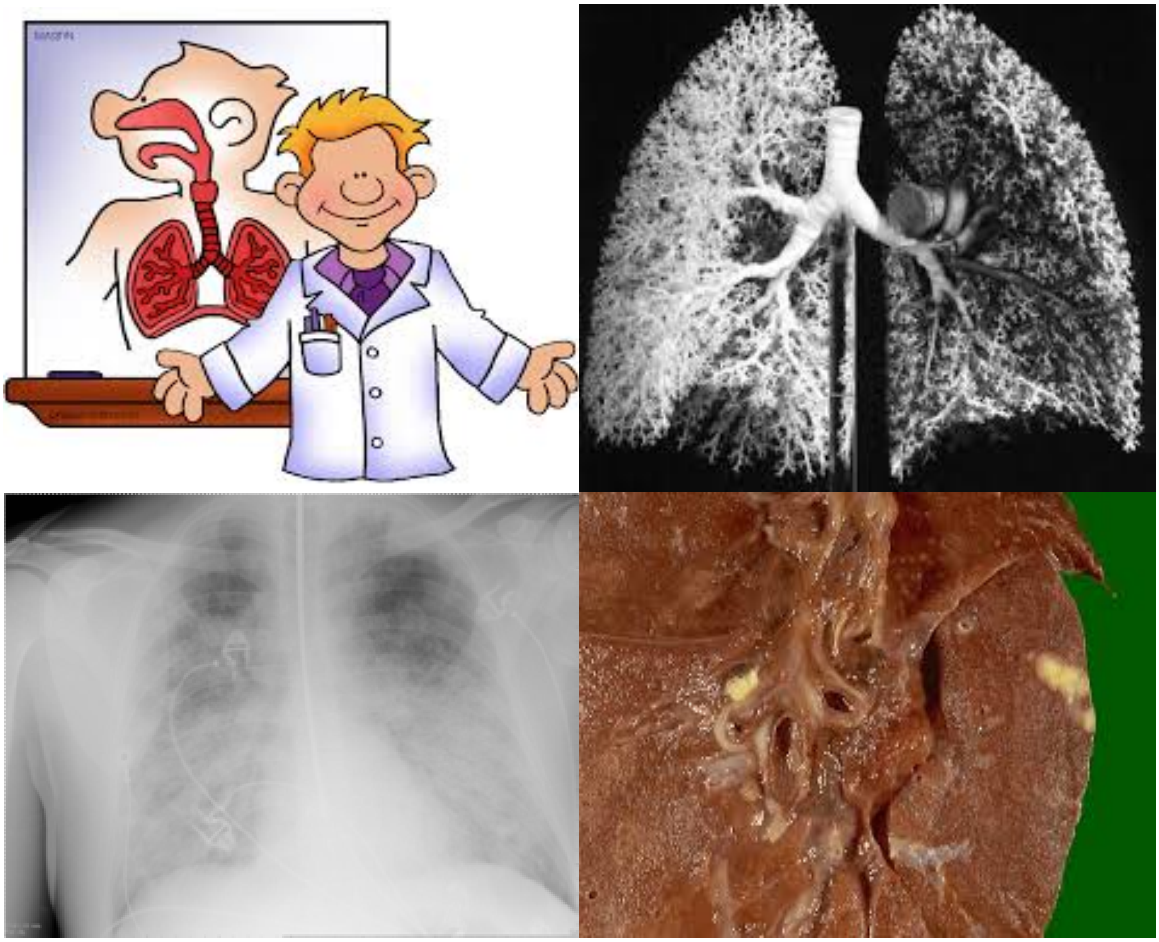
AJK Medical College, Muzaffarabad

Respiratory and Environmental Diseases

3rd Year MBBS



Pre-Requisite: FCPM, CPGP, HRI, LMFO, GIT & EMR Modules

Department of Medical Education

CONTENTS

Module Team

1. Prof. Dr. Anwar ul Haque (Module Planner)
2. Dr. Inayat ur Rahman (Module Coordinator)
3. Brig® Prof. Dr. Ahmed Khan (Member)
4. Dr. Ziyad Afzal Kayani (DME)
5. Dr. Farzana (Member)
6. Dr. Manzoor Ali Khan (Member)
7. Dr. Rubina Rafique (Member)
8. Dr. Khurshid Lone (Member)
9. Dr. Shaukat Dar (Member)

INTRODUCTION

Respiratory diseases are a group of chronic diseases affecting the airways and the other structures of the lungs Hundreds of millions of people around the world suffer from preventable respiratory diseases. Respiratory symptoms are among the major causes of consultation at primary health care centres. A recent report of the WHO for underdeveloped countries have shown that the proportion of patients with respiratory symptoms, among those over 5 years of age, who visit primary health care centres range from 8.4% to 37.0%Asthma and respiratory allergies.Some of the most common and most prevalent diseases of the respiratory system include Asthma Bronchiectasis Chronic obstructive lung disease, including bronchitis and emphysema lung cancer and Pneumoconiosis.The common sympotoms include cough Dyspnoea Stridor Wheezing and Haemoptysis.

Respiratory system functions in integration and co-ordination with CNS and CVS. A healthy, normal functioning respiratory system is of immense importance for maintenance of normal life and healthy body. Respiratory system disorders are common problems and leading cause of morbidity and mortality in Pakistan especially tuberculosis and chronic lung disorders arising mainly from inhalation of pollutants. Similarly carcinoma lung is also a common lung malignancy and is a major cause of morbidity and mortality. The rate of incidence of carcinoma lung has alarmingly increased with increase of pulmonary carcinogens in the atmosphere.

A medical student will have to deal manage and treat with many patients suffering from respiratory diseases/disorders; hence he has to be appraised about the knowledge of this important part of medicine. He/she should have an understanding about the signs and symptoms diagnosis and treatment of these disorders.

This module will also include a very important legal aspect of medicine which is knowledge of asphyxial deaths. In this aspect of medicine the students will become aware of causes of asphyxial deaths and different manners of such deaths. They will also learn postmortem findings and medicolegal importance of such cases.

In addition to it environment is also included in this module ,the term environment implies all the external and internal factors, living and non-living, material and non material which surround the man.It may be divided into three physical components physical, biological and social environment. This module will cover mainly physical and biological aspects including water , waste bacteria, viruses etc.

Core contents of this module includes three (5) themes.Clinical cases have been developed to create clinical relevance to whatever is being taught and learned in this module.

The time table has been designed to guide better implementation of this module and the learning strategies will be elaborated during each session.

1.1 OrganizationofModule

Organization

The module consists of five themes, each based on a real life situation. The module will employ different modes of instruction, briefly described below. Major emphasis will be on discussion, analysis and deductions; all by the students under the guidance of the faculty

1.2 Content Delivery/ Teaching Strategy

Entire curriculum will be delivered by clinical case scenarios each covering a theme. Read cases and learning objectives of the theme which you are supposed to encounter next day, Understand and explain the case to yourself and read the relevant information.

The content of this module will be delivered by a combination of different teaching strategies. These include large group interactive sessions (LGIS), small group interactive discussions (SGID), demonstrations in pathology laboratories, practicals and clinical skill sessions at skill lab/clinical sessions. In addition there will be a group project which will be assessed at the end of the block

Small Group Interactive Discussion (SGID):

Main bulk of the course content will be delivered in small group sessions. Each theme has an associated case. The case will be the core around which learning will take place. Depending on the case you might be required to deduce objectives and learning issues or only learning issues. Every group will have a facilitator assigned to it. The facilitator will be there to keep you on track, giving you maximum liberty to discuss and achieve the objectives as a group. Small groups in some cases may be followed by a wrap up session. Rest of the information will be there in the schedule.

Large group Interactive Sessions (LGIS):

Large group instruction will be employed at times sparingly. Attend large group sessions with the following focus

- Identify important points

- Ask questions of points not well understood in the text
- Measure your learning comprehension

Videos:

Video demonstrations on history taking and clinical examination, on diseases like anemia, bleeding disorders, stem cell transplant, safe blood transfusion, rheumatoid arthritis, osteoarthritis, goutyarthritis, SLE, asthma etc. will be shown to give you an idea into the disease process, testing and practical aspect of communicating with the patients.

Hands-on Activities/ Practical:

Practical activities, linked with the case, will take place.

Skill Lab/ Laboratory:

Attend your scheduled skill lab/ laboratorysessions and take advantage of free time for study. Use your labs to correlate text with actual specimens in lab practice.

1.3 **Assessment:**

- **SUMMATIVE ASSESSMENT:** of RES & CVS Modules will be conducted at the end of CVS Module.
- Marks obtained in the module examination (internal assessment) will constitute 30% of total marks at the end of year- Professional University Examination.

LIST OF ICONS

Introduction to case

Objectives

Critical questions

Assessment

Laboratory sessions

Resourcematerial

Keywords

Table of Specifications (TOS)

SR. NO.	THEME	WEIGHT%
1	Cough with Hemoptysis	30%
2	Dyspnea	35%
3	Asphyxia	25%
4	Water	10%

LEARNING OBJECTIVES

THEME-1: Cough with Hemoptysis

At the end of the theme the student should be able to:

1. Correlate the symptoms and signs of respiratory tract infection to underlying pathophysiology and Lab diagnosis.
2. Describe the important properties, pathogenesis and lab diagnosis of Mycobacterium tuberculosis.
3. Formulate plan for infection control measures for patients with pulmonary tuberculosis in health care facilities and community.
4. Describe mode of epidemiological triad for tuberculosis ,prevention and control strategies for pulmonary tuberculosis.
5. Enlist the common micro-organisms causing pneumonia according to the age group.
6. Define atypical pneumonia, enlist organisms causing atypical pneumonia.
7. Classify streptococci & Explain the important properties, pathogenesis and lab diagnosis of streptococcus pneumoniae.
8. Compare and contrast the important properties, pathogenesis and lab diagnosis of Aspergillosis and legionella.
9. Enlist the viruses causing the respiratory tract infections.
10. Describe the pathogenesis and lab diagnosis of influenza.
11. Classify the tumors of the lungs, and correlate their clinical presentation, pathogenesis and Lab. diagnosis.
12. Demonstrate history and examination of a patient with pneumonia.
13. Council the patient/family of prevention and outcome of ATT.
14. Explain pharmacology of anti-tussives, expectorants and mucolytics

THEME-2:Dyspnea

At the end of the theme the student should be able to:

1. Enlist different causes of acute breathlessness
2. Describe the pathophysiology, clinical presentation, diagnosis and management of bronchial asthma.
3. Investigate a case of acute breathlessness by a flow sheet.
4. Describe the pathophysiology of hypoxemia and hypercapnia.
5. Describe the pathogenesis and lab diagnosis of pulmonary infarction.
6. Compare and contrast the pathogenesis clinical presentation, diagnosis and management of restrictive and obstructive pulmonary diseases.
7. Classify drugs used to treat bronchial asthma
8. State role of corticosteroids in acute episode and long term management of asthma
9. Explain the mode of action and adverse effects of B2 agonists. What are their limitations and how can we overcome the receptor down regulation caused by them?
10. Describe the role of methylxanthines in Bronchial Asthma, What is their mode of action and adverse effect, precautions and drug interaction.
11. Enlist the leukotriene pathway inhibitors. Describe their role in Bronchial Asthma.
12. Explain whether they have more prominent bronchodilator action or anti inflammatory action.
13. Enlist mast cell stabilizers. Describe their role in treatment and proghylaxis of Bronchial asthma.
14. Describe the chemical agents leading to silicosis, Anthracosis, Asbestosis and Byssinosis.
15. Explain different measures (medical measures, engineering measures, legislative measures) for the prevention of pneumoconiosis.
16. Describe and understand the condition “farmer’s lung”.

THEME-3: Asphyxia

At the end of the theme the student should be able to:

1. Define and classify the asphyxial death.
2. Describe mechanism, pathophysiology and general signs/symptoms of asphyxia.
3. Enlist various types of hanging, postmortem findings and medicolegal importance of hanging.
4. Define strangulation, its types, postmortem findings and medicolegal importance.

5. Describe deaths due to suffocation, cause of death, postmortem findings and medicolegal importance.
6. Describe traumatic asphyxia, its types, cause of death, postmortem findings and medicolegal importance.
7. Define drowning, its pathophysiology, types and cause of death, postmortem findings, diagnosis and medicolegal importance.
8. Describe mechanism of death by Carbon Monoxide poisoning, postmortem findings and medicolegal importance.
9. Write and interpret postmortem report in a case of drowning/ Strangulation/ throttling/ Carbon Mono oxide poisoning.

THEME- 4: Water

At the end of the theme the students should be able to;

1. Classify water related diseases on the basis of infectious/non-infectious diseases (Bradley Feachem classification), and their prevention.

Clinical Cases

THEME-1: Cough with Hemoptysis

CASE HISTORY:

Presenting Complaint: A 50-year-old man presents to the outpatient department of Abbas Institute of medical sciences with progressive cough with blood tinged sputum for the last 2 months.

History of Present Illness:

The patient presents with increasing shortness of breath, cough, fever, weight loss, and night sweats for the past 4 months.

Past Medical History (PMH): Diabetes mellitus type-II (DM), Hypertension (HTN)
Allergies: The patient denies any significant drug or environmental allergies.
Surgical History: The patient has had no surgery.
Hospitalizations: No significant history.

GENERAL PHYSICAL EXAMINATION:

- Temperature: 37.6 ^{o}C
- Pulse: 92 bpm with normal peripheral pulses
- Respiration: 24 bpm
- Blood Pressure: 160/105 mmHg
- Weight: 64 Kg
- Height: 5'-9"
- He demonstrates anergy by skin testing to mumps and Candida antigens. Her tuberculin test is positive and shows an induration of more than 12mm.

General Appearance: 56yearoldmale, oriented in time and space, looking pale and anxious

REVIEW OF SYSTEMS:

CARDIOVASCULAR: Peripheral pulses are normally palpable with audible S1 & S2.
RESPIRATORY: Normal vesicular breathing with course crepitation on the right upper chest.

Gastrointestinal	Heart Burn and Epigastric Pain On & Off		
Genital/Reproductive	NAD	Urinary	NAD
Musculoskeletal.	Vague Body Aches	Endocrine	NAD
Neuro	Intact	Psych	Patient feels anxious about the passage of blood in the sputum

INVESTIGATIONS:

Labs:

WBC: 7800/mm3 Neutrophils51%, Lymphocytes 40%, Monocytes 8%, Eosinophils 1%
Hemoglobin: 11.8g/dl Lab Tests: Normal RFT, Fasting Blood Sugar 150mg/dL

Diabetes mellitus type-II (DM), Hypertension (HTN),

CRITICALQUESTIONS:

1. How will you differentiate Haemoptysis from Haematemesis?
2. What are the possible causes of cough with blood tinged sputum in a 50 year old patient?
3. What lab tests you will request for this patient?
4. How the imaging studies will help us in the diagnosis of his disease?
5. What is the role of skin testing in the diagnoses of an infectious disease?
6. Is there any role of bronchoscopy in the diagnosis of his disease?
7. What are the causes of dysponea in a middle aged person?
8. What is the role of type-II Diabetes mellitus in causing the disease?

THEME-2: Dyspnea

CASE HISTORY-1:

Presenting Complaint: A 11-year-old girl presents with dry cough shortness of breath after a visit and a brief stay at Islamabad. She has Shortness of breath while speaking and at rest. She also gives history of Orthopnea.

History of Present Illness:

History of present illness. The parents of the patient admit that she has not been well ever since her child hood .They also admit that her condition worsens while being outdoor especially while they take her to a park. They have noticed that her condition worsens during the Month of March and April and also during the month of September and October.

Past Medical History (PMH): NAD

Allergies: The patient denies any significant drug allergies.

Surgical History: The patient has had no surgery.

Hospitalizations: No significant history.

GENERAL PHYSICAL EXAMINATION:

Temperature: 37.4 ºC Pulse: 80 bpm with normal peripheral pulses Respiration: 28 bpm

Blood Pressure: 110/75 mmHg Weight: 33 Kg Height: 4'

General Appearance: 11year-old-child, looking otherwise healthy and well nourished, oriented in time and space and quite interested in the surroundings

REVIEW OF SYSTEMS:

CARDIOVASCULAR: Peripheral pulses are normally palpable with audible S1 & S2.

RESPIRATORY: Vesicular breathing with prolonged expiration and expiratory wheezes

Gastrointestinal	NAD	Genital/Reproductive	NAD
Urinary	NAD	Musculoskeletal.	NAD
Endocrine	NAD	Neuro	Intact

INVESTIGATIONS:

Labs:

WBC: 7800/mm3, Neutrophils50%, Lymphocytes 40%, Monocytes 4%, Eosinophils 6%

Hemoglobin: 13g/dl

Lab Tests: Normal RFT, Fasting Blood Sugar 80mg/dl

CRITICALQUESTIONS:

1. What are the causes of shortness of breath in a child .an adult and an old person?
2. What is the clinical diagnosis of this patient?
3. How would you classify the diseases of the lung which cause shortness of breath (dysponea)?
4. What is orthopnea?
5. Enumerate the respiratory function tests.
6. What respiratory tests would you like to perform in this case?
7. What is the relevance of doing arterial blood gases in patients with dysponea?
8. What is the importance of seasonal variation of her symptoms?

THEME-2: Dyspnea

CASE HISTORY-2:

Presenting Complaint: A 62 year old man has history of cough, sputum production and breathlessness for last 12 years.

History of Present Illness:

This man is suffering above mentioned symptoms for last 12 years. Breathlessness has progressively worsened

and at present he becomes breathless on climbing 12 stairs at a normal pace. He produces 2 to 3 tea spoon full of sputum per day for most of the time. he is comfortable at rest and has no nocturnal chest symptoms.
He is taking beta blocker for his hypertension which is well controlled.

Past Medical History (PMH): He remained in good health with no history of previous hospitalization

Personal History: He is a chain smoker and had been smoking one pack per day for last 42 years. He was a teacher by profession and is retired for last 2 years.

Hospitalizations: No significant history.

GENERAL PHYSICAL EXAMINATION:

Temperature: 37 ºC Pulse: 96/minute Blood pressure: 160/90
Oxygen saturation: 88% JVP: not raised Oedema pedal or sacral: negative
Chest: barrel shape, bilaterally decreased expansion, percussion is hyper resonant but there are inspiratory crackles and ronchi on auscultation
Heart: NAD Abdomen: NAD CNS: NAD

INVESTIGATIONS:

Haemoglobin 16.5 g/deciliter WBC 78,000/mm^3
(LFT, RFT, blood sugar level) normal
Chest x-ray normal cardio thoracic ratio and hyper inflation, flat hemi diaphragm, large central pulmonary arteries increased bronco vesicular marking
Spirometry post bronco dilater FEV_1 is <80% of predicted value accompanied by $FEV_1/FVC<70\%$

CRITICALQUESTIONS:

1. What can be the differential diagnosis of chronic progressive dyspnoea with cough?
2. How can we differentiate between obstructive and restrictive lung disease by spirometery?
3. What is the clinical diagnosis of this patient?
4. Enumerate steps of management?

THEME-3: Asphyxia

CASE HISTORY:

Presenting Complaint: A dead body of a female with a ligature mark round the neck is brought for autopsy in SKBZ/CMH Muzaffarabad. There is history of 5-years back marriage and no issue. The husband married second wife 2-years back. She has developed depression after second marriage of her husband and was taking antidepressant medicines off & on.

CRITICALQUESTIONS:

1. Discuss the medicolegal problems?
2. Discuss line of approach to such problem?

PBL-01

A 25 -year-old boy was admitted to the AIMS hospital with a history of 7 weeks of increasing malaise, myalgia, nonproductive cough, and shortness of breath. She had developed daily fevers of 38–39 °C and had a recent 5-kg weight loss. He was given an oral cephalosporin with no benefit.
His past medical history showed that his routine medical check at the age of 12 had a negative chest radiograph. The patient's grandmother had died of tuberculosis when the patient was an infant; the patient did not know if he had had contact with his grandmother. The patient was given BCG vaccine as a child. He was currently living with relatives who operated a guest house for about 30 persons.

Clinical Features:

His temperature was 39 °C, pulse 100/min, respirations 20/min, and blood pressure 120/80 mm Hg. His physical examination was entirely normal. The examiner was unable to palpate his spleen; the liver was of normal size to percussion; and there was no palpable lymphadenopathy.

Laboratory Findings & Imaging:

The hemoglobin was 8.3 g/dL (normal, 12–15.5 g/dL), and the hematocrit was 27% (normal, 36–46%). The peripheral blood smear showed hypochromic, microcytic red blood cells. The platelet count was 50,000/µL (normal, 140,000–450,000/µL). The white blood cell count was 7000/µL (normal), with a normal differential count. The prothrombin time was moderately prolonged and the partial thromboplastin time mildly prolonged. The liver function tests were an aspartate aminotransferase (AST) of 140 units/L (normal, 10–40 units/L), alanine aminotransferase (ALT) 105 units/L (normal 5–35 units/L), bilirubin 2 mg/dL (twice normal), and alkaline phosphatase 100 units/L (normal 36–122 units/L). The serum albumin was 1.7 g/dL (normal, 3.4–5 g/dL). The creatinine, blood urea nitrogen, and electrolytes were normal. Urinalysis

showed a few red and a few white blood cells. Two routine blood cultures were negative. Sputum and urine cultures grew small amounts of normal flora.
Serologic tests for HIV-1, hepatitis B virus antibody and antigen, Coccidioidomycosis, leptospirosis, brucellosis, mycoplasmal infection, Lyme disease, and Q fever were negative. A tuberculin skin test was negative, as were skin tests with mumps and candida antigens. His chest radiograph showed bilateral interstitial infiltrates.

PBL-2

A 10-year-old girl with a history of poorly controlled asthma presents to the emergency department with severe shortness of breath and audible inspiratory and expiratory wheezing. She is pale, refuses to lie down, and appears extremely frightened. Her pulse is 120 bpm and respirations 32/min. Her mother states that the girl has just recovered from a mild case of flu and had seemed comfortable until this afternoon. The girl uses an inhaler (albuterol) but "only when really needed" because her parents are afraid that she will become too dependent on medication. She administered two puffs from her inhaler just before coming to the hospital, but "the inhaler doesn't seem to have helped."

PBL-3

An 18 year old boy presented to the OPD department of Aims on 27th September 2013 with fever, myalgias, headache, sore throat, for the last one week He has suddenly developed sever dry cough for the last two days for which he is extremely worried. The muscle pains have also worsened. He gives history of vomiting during a bout of coughing.
The patient had a temperature of 38.60C.There was no skin rash. His X-Ray did not reveal any significant finding. The nasal swab, throat swab and blood specimens were sent to the lab and the patient was sent home with a prescription of analgesics, antipyretics and antihistamines. The swabs failed to grow any bacterial pathogens, however his blood showed the presence of viral antigens.
After an interval of 7 days the patient presented to the emergency room with severe dysponea and respiratory distress. A chest x-ray showed bilateral ground-glass opacities and areas of consolidation.

LEARNING RESOURCES

Reference Books

- ROBBINS BASIC PATHOLOGY 8th ED
- JAWETZ, MELNICK & ADELBERG'S MEDICAL MICROBIOLOGY 25TH ED
- ROBBINS AND CORTAN PATHOLOGY BASIS OF DISEASE WITH SEARCHABLE FULL TEXTONLINE 8th ED
- ROBBINS AND CORTAN ATLAS OF PATHOLOGY 2nd ED.
- ROBBINS AND COTRAN REVIEW OF PATHOLOGY 3rd ED
- BRS PATHOLOGY
- CLINICAL PHARMACOLOGY BY KATZUNG
- RANGE AND DALE'S PHARMACOLOGY WITH ONLINE ACCESS 7th ED
- MCQs IN PHARMACOLOGY WITH EXPLANATORY ANSWER
- TEXT BOOK OF FORENSIC MEDICINE AND TOXICOLOGY BY NEGASH KUMAR.
- PARK'S TEXBOOK OF PREVENTIVE AND SOCIAL MEDICINE.

Web Links
Following online medical dictionaries can be referred
www.nlm.nih.gov
www.medterms.com
www.bloodmed.com
www.online-medical-dictionary.org

AJK Medical College, Muzaffarabad

Schedule for RES & Environmental Diseases– (3rd Year)

Week-1

TIME	Monday	Tuesday	Wednesday	Thursday	Friday
8:00am-9:00am	**LGIS** Radiology in GIT **Dr. Muhammd Nawaz**	**LGIS** Introduction to Module PBL-1A **Prof. Munir & Module Team**	**LGIS** Genetic Diseases of Lungs **Prof. Anwar**	**LGIS** H Influenzae **Prof. Munir**	**LGIS** Management and Treatment of Bronchial Asthma and COPD I **Prof. Arif**
9:00am-10:00am	**Clinical Rotation**	**LGIS** Treatment regimens of pneumonia & T.B **Prof. Arif**		**Clinical Rotation**	**LGIS** Anti Tussive expectorant , Mucolytic **Prof. Arif**
		Tea Break			
10:30am-12:30pm		**SGD** Hospital acquired pneumonias **Prof. Munir & Team-3** **WRAP UP** **Prof. Munir**	**LGIS** Community acquired pneumonias **Prof. Munir** **SGD** Snake Bite and its Management **Prof. Humayun & Team-3** **WRAP UP** **Prof. Humayun**		**PBL-1B** **Prof. Munir & Team-3**
12:30-1:30pm	**LGIS** Congenital Hyperbilirubinemia **Maj. Saba Irum**	**LGIS** Pulmonary Tuberculosis Presentation Diagnosis management prevention/control **Dr. Munazza**		**LGIS** Snake Bite and Its Management **Dr. Naseer Sheikh**	**LGIS** Cyanide Poisoning **Dr. Naseer Sheikh**
Lunch & Prayer Break					
2:00pm-3:00pm	**Practical** Pharmacology **Prof. Arif & Team-3**	**LGIS** Oregano phosphorus Poisoning **Dr. Naseer Sheikh**	**Practical** Pharmacology **Prof. Arif & Team-3**	**Practical** - Lung Tumors - Pneumonia - T.B - Gram Staining **Maj Asif ,Dr Mumtaz** **Prof. Munir & Team-3**	**SDL**
3:00pm-4:00am	(GIT & Nutritional Diseases Module)	**DSL**			

AJK Medical College, Muzaffarabad

Schedule for RES & Environmental Diseases – Class of 2017 (3rd Year)

Week-2

DATE					
TIME	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
8:00am-10:00am	**LGIS** Pleural Effusion **Dr Khawaja Imtiaz**	**SGD** Chronic Obstructive pulmonary disease **Dr. Rubina & Team-3** **Wrap-up** **Dr. Rubina**	**SGD** Management and Treatment of Bronchial Asthma and COPD **Prof. Arif & Team-4** **Wrap-up** **Prof. Arif**	**LGIS** Mental Health Act 2001 **Dr. Mustafa Awan/ Prof. Humayun**	**Practical** Forensic Medicine **Prof. Humayun & Team-4**
	Clinical Rotation			**Clinical Rotation**	
Tea Break					
10:30am-12:30pm	**Clinical Rotation**	**LGIS** Pulmonary infarction and embolism **Prof. Anwar**	**LGIS** Respiratory Track Infection: Influenza Virus **Dr. Mumtaz**	**Clinical Rotation**	**PBL 2B** **Prof. Arif and team-4**
12:30pm –1:30 pm	**PBL- 2A** **Prof. Arif & Team-4**	**SGD** Oregano Phosphorus Poisoning **Prof. Humayun & Team-3** **WRAP UP** **Prof. Humayun**	**Field Visit Community Medicine** Water filtration plant Makri 11:30 – 4:00 PM	**LGIS** water Related disease **Prof. Ahmad Khan**	**LGIS** Opiate Poising **Dr. Naseer Sheikh**
Lunch & Prayer Break				**Lunch & Prayer Break**	
2:00pm-4:00pm	**SGD** Occupational health/Pneumoconiosis **Prof. Ahmed Khan/Prof. Anwar Dr.Khalid**	**LGIS** Pathogenesis, Clinical Presentation & Diagnosis of Asthma **Prof. Nagi**		**LGIS** Oregano Phosphorus Poisoning **Dr. Naseer Sheikh**	**SDL**
		LGIS Management & Bronchial Asthma & COPD-II **Prof. Arif**		**LGIS** Restrictive & Obstructive Lung Disease **Prof. Anwar**	

AJK Medical College, Muzaffarabad

RES & Environmental Diseases – Class of 2017 (3rd Year)

Week-3

TIME	Monday	Tuesday	Wednesday	Thursday	Friday
8:00am-10:00am	**Written Assessment**	**SGD** Fungal infections **Team-3 Wrap up Prof. Munir & Dr. Mumtaz**	**SGD** Carbon Monoxide poisoning **Dr. Naseer & Team-4 Wrap-up Dr. Naseer**	**LGIS** Green house effect and global warming **Prof. Ahmad/Dr Murtaza**	
	Clinical Rotation			**Clinical Rotation**	
Tea Break					
10:30am-12:30pm	**Clinical Rotation**		LGIS Restrictive Pulmonary diseases **Prof. Anwar Ul Haque**	**Clinical Rotation**	**Practical Pharmacology**
12:30pm-1:30pm	**LGIS** Vaccine preventable respiratory diseases **Dr.Murtaza Gillani/ Dr. Uzma**	**LGIS** Occupational health/Pneumoconiosis **Prof. Ahmad Khan, Prof. Anwar & Dr. Khalid**			
Lunch & Prayer Break					
2:00pm-4:00pm	**SGD** Antifungal drugs **Prof. Arif & Team-4 Wrap-up Prof. Arif**	**SGD** Management of Bronchial Asthma III **Prof. Arif & Team-4 Wrap-up Prof. Arif**	**Practical** Postmortem Exam in Drowning Asphyxia **Prof. Humayan & Team-4**	**LGIS** Medicolegal aspect of drowning **Prof. Humayan / Dr Naseer**	**SDL**

Inquires & trouble shooting

Department of Medical Education,
AJK Medical College, Muzaffarabad, AJK, Pakistan
Email: ayub@ajkmc.edu.pk, DME@ajkmc.edu.pk
Tel: +92-5822-920527-8/808, 816