Blood & Circulation and Respiration & Gas Exchange module – Year 3 Semester 1

Credits- 2.5

Respiration & Gas Exchange - Year 3 Semester 1

Duration: 02 Weeks (10 days)

Topic/ Concept	Objectives	Time	T/L activity	Department
2006-3/SBM-2/01				
Introduction to respiratory diseases The disease burden / epidemiology	The students should be able to; 1. list the commonly prevalent respiratory diseases in the world 2. explain the extent of respiratory morbidity 3. explain the extent of respiratory mortality 4. state the modes of transmission of such respiratory diseases 5. describe the environmental factors which contribute to the spread of respiratory diseases	1hr	Lecture	Community Medicine
2006-3/SBM-2/02				
Clinico-pathological and radiological correlation of the following conditions of the lung a. Consolidation b Collapse c. Fibrosis d. Pleural effusion e. Pneumothorax f. Lung cavity g. Solid masses h. Pulmonary oedema i. Pulmonary embolism j. Lung infarction	1. recall processes of general pathology 2. explain the pathogenesis of each of the conditions 3. describe the clinical features of the basic pathological conditions mentioned above 4. describe the basic radiological signs of the conditions mentioned	1h 1h 1h	Lecture demonstration with museum specimen Lecture Lecture demonstration	Pathology Medicine Radiology

2006-3/SBM-2/03				
Small airway diseases/ COPD and rationale of management	describe the aetiology and pathophysiology of Asthma and COPD *list the classes of drugs used in the treatment of asthma and COPD* *describe the mechanism of action, pharmacokinetics, indications and adverse effects the above drugs*	2h 1hr	Lecture(2hrs) & Demonstration(1hr -SGLA)	Pharmacology
2006-3/SBM-2/04				
a. <u>Pneumonia</u> 1.Etiology 2.Pathology and complications 3.Pharmocological management	1. recall the infective microorganisms 2.explain the aetiology and pathogenesis of lobar and bronchopneumonia 3.describe the macroscopic and microscopic features of the lung and bronchi in both types of pneumonia 4.describe the pathological and clinical effects of pneumonia 5. Describe the cause and pathology of industrial lung disease. 6.describe the sequelae and complications of pneumonia	2h 1h	Lecture and museum specimen class Museum class	Pathology Pathology
b. <u>Pulmonary tuberculosis</u> 1.Pathology and complications 2.Aetiology and diagnosis 3. Pharmacological basis of anti TB treatment	1. recall the general pathology of chronic inflammation and tuberculosis 2.recall the lesions in the lung in tuberculosis and explain their pathogenesis. 3.enumerate the diagnostic tests for tuberculosis and explain the basis of these investigations. 4.describe the basis of drug treatment of tuberculosis	1 h	lecture	Pharmacology
C. Respiratory tract infections	1. list the infections which occur in the respiratory tract and associated organs 2. state the most likely infective agents associated with infection at each site 3. recall the source and virulence factors of the infective agents associated with respiratory tract infection 4. describe the specimen/s, (including mode of collection and transport) a diagnostic tests used to determine the aetiology of infection of the respiratory tract. 5. describe the principles of choosing antimicrobial therapy in treatment of respiration tract infection.	1h	Lecture	Microbiology

2006-3/SBM-2/05				
Abnormalities of gas exchange and rationale of management	1. recall pulmonary ventilation, perfusion and gas exchange 2.recall the effects of altered V/Q ratios and dysfunction of alveolar capillary membrane on gas exchange and A- a gradient 3. explain how gas exchange is altered in states of V/Q mismatch such as pulmonary oedema, pneumonia, ARDS, low blood pressure, mechanical ventilation and pulmonary embolism 4. discuss how drugs could reverse the patho-physiological processes of pulmonary oedema	2hr 1hr	Lecture Lecture	Anesthesiology Pharmacology
2006-3/SBM-2/06				
Interstitial Lung Diseases	1. To know that interstitial lung diseases is a group of diseases that share some common clinico-pathological features 2. To outline the common clinico-pathological features shared by interstitial lung diseases 3. To know what is meant by honey comb lung 4. To know the common disease entities included in interstitial lung diseases 5. To briefly outline the clinico- pathological features of these disease entities	1hr	Lecture	Pathology
2006-3/SBM-2/07				
Neoplasms of the lung , mediastinum and pleura	1. recall chronic inflammation, metaplasia, dysplasia, carcinogenesis & spread of tumours 2. classify epithelial neoplasms of lung and pleura 3.describe the aetiopathogenesis and morphological appearances of tumours of lung and pleura 4. describe the mode of spread of tumours of lung 5. list the paraneoplastic syndromes associated with lung tumours. 6. describe the diagnostic tests available for tumours of lung	2hr	Lecture Demonstration	Pathology

Respiration & Gas Exchange module – (Year 3 Semester 1)
Module Summary

	Lectures (hrs)	Museum class (hrs)	Total (hrs)
Community Medicine	1		1
Pathology	6	1	7
Medicine	1		1
Radiology	1		1
Pharmacology	5 (1hr SGL)		5
Microbiology	1		1
Anesthesiology	2		2
Total	**17**	**1**	**18**

Names and departments of the teachers involved in the teaching programme:

Dept. of Pathology
Dr S Wijetunge
Dr R Waduge
Dr R.Gunawardena
Dr E Siriweera
Dr A Siribaddana

Dept. of Pharmacology
Dr U Dangahadeniya

Dept. of Medicine
Dr I B Gawarammana

Dept. of Community Medicine
Dr D Madegadera

Dept. of Radiology
Dr. B. Hewavithana

Dept. of Anesthesiology
Head/ Anesthesiology