Year 4 course Specifications
Semester 7
Heart lung and Blood (HLB)
(MPPh2S7HLB)

University of Mansoura **Faculty of Medicine**

Course specifications
Programme(s) on which the course is given: Mansoura Manchester Programme for Medical Education
Major or minor element of programmes: Heart, Lung and blood.
Department offering the programme: All depts in Faculty of Medicine
Department offering the course: Chest Department, Cardiology Department, Haematology and Medical oncology Department, Psychiatry Department, Vascular surgery Department, Thoracic Surgery Department.
Academic year / Level 4th year
Date of specification approval: May 2016

A- Basic Information
Title: Heart lung and blood **Code: MPPh2S7HLB**
Teaching hours/ week
Lecture: 5 h/w
Tutorial: 3PBL+ 4 h/w
Practical: 16 h/w
Total: 25 h/w

B- Professional Information
1 – Overall aims of course
Semester 7 is about heart, lung and blood. Each PBL case contains case learning outcomes that by definition must be linked to the learning outcomes for the semester. Each case is integrated and contains cues that raise potential learning objectives relating to knowledge, skills and attitudes in all areas of respiratory, cardiology and hematology medicine with some ethical and medico legal aspects.

2 – Intended learning outcomes of course (ILOs)
a- Knowledge and understanding:
a1- Recognize knowledge of the structure of lung, mediastinum and bronchial tree
a2- Identify anatomy of abdominal aorta.
a3-Describe normal anatomy of coronary arteries and physiology of the coronary blood flow.
a 4- Review process of haemopoiesis and normal value of CBC.
a5- Summarize mechanisms of blood clotting.
a6- Explain development of hypoxia.
a7- Review normal regulation of blood pressure.
a8- List smoking related disorders
a9- Describe chronic obstructive pulmonary disease (COPD) as regard definition, risk factors, pathology, clinical picture, investigation, classification and treatment. Also its complications as exacerbation and cor pulmonale.
a10- Identify pneumonia by its clinical picture and assessment of severity.

a11- Explain types and definition of respiratory failure.
a12- Recognize bronchial asthma as regard definition, precipitating factors, pathological changes in asthma, clinical picture, investigations, classifications indication and limitations of its therapy.
a13- Describe the psychological aspect of chronic diseases.
a14-List occupational lung diseases and its medicolegal aspects.
a15- Summarize bronchogenic carcinoma as regard epidemiology, pathology, staging different clinical presentation, investigation, treatment either curative or palliative treatment, and role of multi-displaniry team (MDT) in management of lung cancer.
a16- Explin tuberculosis as regard its causative organisms mode of transmission, pathology of TB, different clinical presentation either pulmonary and extrapulmonary, investigation of TB case, complications of TB and DOTS strategy for treatment of TB.
a17- Describe plural effusion as regard causes, clinical picture, investigation, and differential diagnosis.
a18-Discuss hypertension as regard epidemiology, types, classification, clinical diagnosis, investigations, complications of hypertension, treatment pharmacological with stress on side effects of drugs, and non pharmacological treatment.
a19-Discuss aortic aneurysm as regard risk factors, screening for aortic aneurysms, clinical pictures, investigation, management of ruptured aortic aneurysms and problems related to massive blood transfusion.
a20-Recall organ dysfunction as regard definition, laboratory investigation and management plan.
a21-Recognize Ischemic heart diseases as regard pathology, risk factors, investigation differential diagnosis, and management options.
a22- Recognize heart failure definition, pathophysilogy, aetiology and treatment.
a23- Describe pathology, pathogenesis of infective endocarditis, investigation and use of antibiotics.
a24- Describe the causes of anemia in different age groups, symptoms of anemia, investigation, treatment of different type of anemia, screening for anemia, value of bone marrow examination.
a 25- Identify myeloma as regard histo-pathology, investigation, treatment.
a 26- Discuss molecular basis of leukemia, classification, clinical presentation, investigation, complication, treatment and its complications.
a27- Describe Hodgkin's lymphoma as regard clinical presentation, histological classification, staging, investigation, treatment, and prognosis.
a28- Describe non Hodgkin's lymphoma as regard clinical presentation, histological classification, staging, investigation, treatment, and prognosis.
a29-Recognise risk factors of venous thrombosis, chronic venous insufficiency, risks of deep venous thrombosis and prophylaxis measures.
a 30- Identify pulmonary thromboembolic diseases as regard risk factors, clinical presentation investigation and treatment.
a31-Recognise the common causes of cardiac arrest, mechanisms of electromechanical and protocol for management of cardiac arrest.

b- Intellectual skills

b1- Compare for differential diagnosis of obstructive airway diseases.
b2 –Differentiate between different cuses of dyspnea, cough expecturation, hemoptysis, wheezy chest, chest pain.
b3-Distiguish different causes of weight loss, pallor, bleeding tendency, lymphadenopathy and splenomegaly.
B4 -Arrange for appropriate investigations to elucidate the pathological processes.

B5-Apply personal judgment for analytical and critical problem solving.
B6-Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.
B7- Plan for appropriate therapy for each patient.

c- Professional and practical skills

c1-Formulate clinical history from patient
c2- Examine respiratory system, cardiovascular system, lymph node and mental state.
c3-Interpret chest radiograph, ECG, pulmonary function test, arterial blood gases and blood picture
c-4 Practice for arterial puncture, Basic and advanced life support, measurement of peak flow meter and use of inhalation devices.

d- General and transferable skills

d1-Mange and present information (oral & SSC formats) and communicate ideas, concepts.
d2-Work effectively in team
d3- Show an awareness of the moral and ethical responsibilities involved in patient care and in the provision of care patients.

3- Contents

Topic No. of hours Lecture Tutorial/Practical

Topic	No. of hours	Lecture	Tutorial/Practical
COPD and respiratory faliur	24	5	19
Bronchial Asthma	24	5	19
Lung cancer and Plural effusion	24	5	19
Tuberculosis and Pneumonia	24	5	19
Hypertension	24	5	19
Aortic Aneurysm	24	5	19
Coronary heart diseases	24	5	19
Heart failure, infective endocarditis	24	5	19
Anaemia	24	5	19
Leukemias	24	5	19
Lymphomas	24	5	19
Thromboembolic diseases, Chronic venous insuffecincy, DVT	24	5	19

4– Teaching and learning methods

4.1-Lecture
4.2-Clinical training and clinical seminars
4.3-Problem based learning (PBL)
4.4- Student selected component (SSC)

5- Student assessment methods

5.1 MCQ…… to assess ….Knowledge and understanding.
5.2 Short essay…… . to assess … Knowledge and attitude.
5.3 OSCE…… to assess ……Skills.
5.4 SSC…… to assess …Over all performance.

Assessment schedule

Assessment 1 MCQ midterm exams…. At Week 6-11-16

Assessment 2 MCQ	Final exam
Assessment 3 Short essay	Final exam
Assessment 4 OSC	Final exam
Assessment 5 ongoing assessment	Every PBL+ SSC

Weighting of assessments

Mid-Term Examination	9.2 %
Final-term Examination	49.2 %
Oral Examination	0%
Practical Examination	30.8 %
Semester Work	10.8 %
Other types of assessment	0 %
Total	100%

Any formative only assessments

6- List of references

6.1- Course notes Student's module book

6.2- Essential books (text books) Fishman's pulmonary diseases, Brauwald's Heart disease, Kawthalker Essential Haematology

6.3- Recommended books Crofton& Douglas' Respiratory diseases, Hurst's the Heart, Wintrobe's Clinical Haematology

6.4- Periodicals, Web sites, etc http://en.wikipedia.org/wiki/main_page

http://www.ncbi.nlm.nih.gov/pubmed/

7- Facilities required for teaching and learning

1-A Theatre which can accommodate 70 students

2. Medical Wards and clinical teaching rooms in University Hospitals: Main Hospital (Chest Department), Medical Specialized Hospital (Cardiology Department and Oncology center.

3. Data show and PC with windows xp as an operating system and office 2007

4. Thre PBL rooms which accommodate 10 students (about 18 to 20 room)

Course coordinator: Nesrien Mohammed Shalabi

Programme Director: Prof. Nagy Abdel- Hady Sayed-Ahmed

Date: May/2016