



COURSE SPECIFICATION

(Physiology related to chest medicine)

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course.	MD degree of chest medicine
(2) Department offering the programme.	Chest Medicine Department
(3) Department responsible for teaching the course.	Chest Medicine Department Physiology Department
(4) Part of the programme.	First Part
(5) Date of approval by the Department`s council	15-3-2016
(6) Date of last approval of programme specification by Faculty council	9-8-2016
(7) Course title.	Physiology related to chest medicine
(8) Course code.	CHEST603 CHEST611PHY
(9) Credit hours.	2credit hours
(10) Total teaching hours.	30 h

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows: (either to be written in items or as a paragraph)

To produce graduate recognizes the physiological background of lung mechanics and performance and then can suspect where the abnormality if present is

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

- A1-identify different types of shock and understand the specific points of differentiation between each type
- A2- recognize neurological control of respiration
- A3- recognizes oxygen and carbon dioxide transport in blood.
- A4- recognize mechanics of inspiration and expiration
- A5-recognize sleep staging and how to differentiate between each stage based on EEG and EMG in polysomnography.
- A6-Explain polysomnography artifacts and how to correct it
- A7-recognize respiratory physiology during sleep
- A8- Explain coagulation pathways and mechanism of different anticoagulant drugs
- A9- Explain bronchial and pulmonary blood supply of lung

B- Intellectual skills

B1 differentiate between different types of sleep apnea

B2 able to differentiate between restrictive and obstructive airway diseases from pulmonary function test

B3 interpret arterial blood gases

B4- able to select anticoagulant drugs based on the patient condition

B5- able to select proper regimen for shock treatment.

(3) Course content.

Subjects	Lectures	Total Teaching Hours
Gas transport:		
1-Oxygen transport	1	
Carbon dioxide transport	1	
Acid-base balance and blood gases	4	
Haemostasis	2	
Control of respiration	2	
Ventilation:	2	
1-Mechanics of inspiration	2	
2-Mechanics of expiration	3	
3-Distribution and efficiency of ventilation	2	
4-Physiology of small airways	2	
5-Work of breathing	2	
Sleep physiology	5	
Shock	2	
Pulmonary circulation	2	

Subjects	Lectures	Total Teaching Hours
Total teaching hours	30	30

(4) Teaching methods:

- 4.1: lectures, seminars, workshops
- 4.2: clinical sessions and work experience
- 4.3: Problem solving, case studies
- 4.4: directed and self directed learning activities

(5) Assessment methods:

- 5.1 Written , for assessment of Knowledge and intellectual ILOs
- 5.2: MCQ for assessment of Knowledge and intellectual ILOs

5.3: logbook assessment and on supervisor reports for assessment of:

- lecture attendance.
- practical and transferable skills.
- different scientific activities as attendance of workshop, conferences, seminarss and theisis discussions attendance.

Assessment 5: MCQ (20% from the marks of written exam)

Mark of each Assessment :

MCQ	20
Written exam.	80
Total.	100

(6) References of the course:

- 6.1: Hand books: Oxford handbook of respiratory medicine
- 6.2: Text books
 - Fishman's Pulmonary Diseases and Disorders
 - Crofton and Douglas's Respiratory Disease
 - Eagan's fundamentals of respiratory care
 - Respiratory physiology the essentials
 - Pulmonary physiology and pathophysiology

- Chest medicine department text books in sleep medicine(Dr ahmed yonus)
- Applied respiratory physiology
- 6.3: Journals: Periodicals of American Journal of Chest Diseases
Periodicals of European Respiratory Journal
Periodicals of Chest Medicine
- 6.4: Websites: Update guidelines of Asthma, COPD, Lung Cancer, Pulmonary Infections
www.GINA.com, www.GOLD.com,

(7) Facilities and resources mandatory for course completion:

Teaching rooms: Patients wards, Pulmonary function tests, Arterial Blood Gases, Respiratory Critical Care wards, Sleep Medicine Laboratory, Allergy Immunology Laboratory, Bronchoscopy wards.

Course coordinator:

Head of the department:

Prof. Mohamad khairy

Date: