
Al- Azhar University
Faculty of Medicine
Department of
Chest diseases



جامعة الأزهر
كلية الطب (بنين)
قسم الأمراض الصدرية

مقرر

الأمراض الصدرية

لطلبة الدبلوم

COURSE of

Chest diseases

For Diploma Degree

2013-2014

Course Specification for the Diploma in Chest Diseases

- **University:** AL-AZHAR
- **Faculty(s):** Faculty of Medicine ,Cairo. Course Specifications Programme (s) on which the course is given **Diploma in Chest Diseases**
- Major or Minor element of program: Major
- Department offering the program: chest diseases
- Department offering the course: chest diseases
- Academic year / Level: postgraduate.2013/2014
- Date of specification approval:

A-Basic Information

- Title : **Course Specification for the Diploma in Chest Diseases**
- Code :07-700-Dp
- Credit Hours:
- Total hours 10 hours/ weeeek divided as follow;
 - Lecture : 2 hours /week
 - Tutorial; 2 hours /week
 - Practical: 6 hours /week

B- Professional Information

- 1- Course aims
- 2- Intended learning outcomes (ILOs)
- 3- Content

1- Course aims

- 1) provide high level of knowledge and understanding of respiratory disease
- 2) Develop skills in the assessment of respiratory patients
- 3) Develop skills in managing patients with respiratory disease
- 4) Highlight the importance of preventative medicine and community services
- 5) Initiate effective communication skills
- 6) Develop good critical appraisal skills
- 7) Develop problem-solving skills

2. Intended learning outcomes (ILOs)

- A. Knowledge and understanding**
- B. Intellectual skill**
- C. Professional and practical Skills**
- D. General and transferable skills**

A. Knowledge and understanding

At the end of the course of Chest-diseases and Tuberculosis, the student shall be able to:

a.1 -	understand etiology, epidemiology, pathophysiology, genetics, diagnosis, clinical features, investigations and management of respiratory disease
a.2 -	Demonstrate knowledge of common chest diseases, their clinical manifestations, including emergent situations and of investigative procedures to confirm their diagnosis
a.3 -	Demonstrate detailed knowledge of pulmonary as well as extra pulmonary tuberculosis and to offer a comprehensive plan of management (Including National TB control programme and DOTS)
a.4 -	Describe the mode of action of commonly used drugs, their doses, side-effect/toxicity, indications and contra-indications and interactions
a.5 -	Describe commonly used modes of management including medical and surgical procedures available for treatment of various diseases and to offer a comprehensive plan of management.
a.6-	Understand of basic facts , theories, of the chest and related subjects/ fields
a.7-	Recognize the understanding Importance of environment and occupation in respiratory disease

B- Intellectual skills

b.1-	Interpretation of the laboratory data including sputum examination - Gram's stain, AFB, cytology including malignant cells
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b.2-	Interpretation of the pulmonary function studies, ECG, , skin tests, blood gas analysis, and other investigations
b.3-	Interpretation of chest X-ray, CT scan
b.4-	Conduct a scientific research
b.5-	Take professional decisions in wide range of professional situations
b.6-	Formulate a differential diagnosis
b.7	Plan investigations and treatment appropriately and according to resources

C- Professional and practical skills

c.1-	Clinical history taking and physical examination ability to analyze symptomatology and physical signs; interpret their significance and arrive at a diagnosis; case-sheet writing and case presentation
c.2-	Demonstrate the use of inhalers, a nebulizer and oxygen equipment
c.3-	Perform and demonstrate spirometry
c.4-	Perform and demonstrate ABG
c.5-	Observation of bronchoscopic procedures.
c.6-	Aspiration of pleural fluid
c.7-	Educate patients with regards to their diagnosis, epidemiology of their condition, investigations and management, and give appropriate advice
c.8-	Write and appraise reports

D- General and transferable skills

d.1-	Communicate and interact effectively with other people and in a small group
d.2-	Work as part of a team, recognizing the strengths, weaknesses, needs and sensitivities of others
d.3-	Learn independently
d.4-	Use information technology to improve his/her professional practice
d.5-	Use time effectively
d.6-	Manage scientific meetings and appropriately utilize time
d.7-	Work as team leader in situations comparable to her work

3-Content

Topic	No of Hours	Lecture	Tutorial/practical
Diagnostic Tools in Pulmonary Diseases	1	✓	✓
Bronchopulmonary infections	1	✓	✓
Manifestation of respiratory diseases	1	✓	✓
Obstructive Diseases	1	✓	✓
Disorders in the Control of Breathing (sleep related breathing disorders)	1	✓	-
Neoplasm of the Lung	1	✓	-
Disorders of pulmonary circulation	1	✓	-
Infiltrative and interstitial Lung Diseases	1	✓	✓
Disorders of the Mediastinum	1	✓	-
Pleural Diseases	1	✓	✓
Respiratory manifestations of extrapulmonary disorders	1	✓	-
Respiratory Failure	1	✓	✓
Diseases of the Diaphragm and Chest Wall	1	✓	-
Occupational Lung Diseases	1	✓	-

Course DESCRIPTION**Diagnostic Tools in Pulmonary Diseases (10% of the course)**

Symptoms of chest diseases. Physical examination. Pulmonary function: testing: Flow-volume loop. Lung volumes. Diffusing capacity. Arterial blood gases. Imaging in chest diseases: Plain chest radiography. Ultrasonography. Computed tomography. Nuclear medicine techniques. Bronchoscopy. Lung biopsy. Other diagnostic procedures: Percutaneous needle aspiration biopsy. Thoracentesis. Pleural biopsy

Bronchopulmonary infections(10% of the course)

Definition. Classification. Risk factors. Etiological agents: Viral. Bacterial. Fungal. Parasitic. Protozoal. Pathology. Pathogenesis. Clinical presentations. Differential diagnosis. Complications. Investigations. Treatment. Microbiology of pulmonary tuberculosis. Pathogenesis. Pathology. Clinical presentations. Diagnostic laboratory tests. Differential diagnosis. Complications. Treatment. Preventive measures. Diseases other than mycobacterium tuberculosis. Multi-drug resistant pulmonary tuberculosis Lung abscess. Empyema.

Obstructive Diseases(10% of the course)

Bronchial asthma. Definition. Risk factors. Classification. Pathology. Pathophysiology. Pathogenesis. Clinical presentation. Diagnosis. Differential diagnosis. Treatment. Special categories of asthma. Complications of asthma. Chronic obstructive pulmonary diseases. Definitions. Pathology. Pathophysiology. Etiology. Pathogenesis. Clinical features of COPD. Diagnosis of COPD. Treatment. Prognosis and course. Complications. Differential diagnosis. Bronchiectasis. Classification. Pathology. Pathogenesis. Clinical presentation. Complications. Diagnosis Treatment.

Occupational Lung Diseases(7% of the course)

Pneumoconioses
. Occupational asthma
. Hypersensitivity pneumonitis
Byssinosis

Disorders in the Control of Breathing (sleep related breathing disorders) (7% of the course)

Hypoventilation. Hyperventilation. Sleep related respiratory disorders: Obstructive sleep apnea. Central sleep apnea

Neoplasm of the lung (7% of the course)

Benign tumors of the lung. The solitary pulmonary nodule. Bronchogenic carcinoma: Classification. Risk factors. Clinical presentation. Diagnosis. Staging. Treatment. Paraneoplastic syndromes. Other primary malignant tumors. Metastatic tumors of the lung.

Disorders of pulmonary circulation(7% of the course)

Pulmonary embolism. Incidence. Risk factors. Pathophysiology. Clinical features. Diagnosis. Prevention. Treatment. Pulmonary hypertension. Definition. Etiology. Pathophysiology. Clinical picture. Diagnosis. Treatment. Cor pulmonale. Pulmonary edema. Definition. Pathophysiology. Diagnosis Treatment. Prognosis.

Infiltrative and interstitial Lung Diseases(7% of the course)

General approach: Classification. Clinical presentation. Pulmonary physiologic testing. Chest radiographic pattern. High resolution computed tomography. Tissue diagnosis. Idiopathic pulmonary fibrosis: Clinical features. Histopathology. Pathogenesis. Diagnosis. Management. Sarcoidosis: Etiology. Pathology. Clinical presentation. Diagnosis Treatment. Infiltrative lung diseases. Pulmonary eosinophilia

Disorders of the Mediastinum(7% of the course)

Normal anatomy of the mediastinum. Pneumomediastinum. Mediastinitis. Tumors and cysts of the mediastinum. Classification and incidence: Clinical presentation. Diagnosis. Lesions occurring typically in the anterior mediastinum. Lesions occurring typically in the middle mediastinum. Lesions occurring typically in the posterior mediastinum

Pleural Diseases(7% of the course)

Pleural effusion: Transudative pleural effusions. Exudative pleural effusions. Pneumothorax. Chylothorax. Hemothorax. Fibrothorax. Tumors of the pleura

Respiratory Manifestations of Extrapulmonary Disorders(7% of the course)

Pulmonary manifestations of cardiovascular diseases. Pulmonary manifestations of renal diseases. Pulmonary manifestations of gastrointestinal diseases. . Pulmonary manifestations of collagenic diseases. Pulmonary manifestations of endocrine diseases

Respiratory Failure(7% of the course)

Definition. Types of respiratory failure. Pathophysiology. Etiological causes. Clinical presentation. Management

Diseases of the Diaphragm and Chest Wall(7% of the course)

Diseases of the diaphragm

Diseases of the chest wall

4– Teaching and learning methods

1. Illustrated Lectures
2. Seminars
3. Clinical Rounds
4. Tutorials
5. Practical clinical techniques
6. Weekly conferences and professors guided rounds
7. Assignment

5-Student assessment methods

- 5.1 Written exam to assess knowledge and skills
- 5.2 Clinical exam to assess practical and professional skills
- 5.3 Oral exam to assess general and transferable skills

Weighting of assessments

- Final-term examination 50 %
- Oral examination. 25 %
- Practical examination 25 %
- Total 100%

I. Examination description:

A. Log book: (attached at the end) must be completed during the year and every student should have:

1. **Attend at least 75% of the clinical classes.**
2. **Actively participated in discussions in tutorial classes.**
3. **Shared in the scientific day and give an accepted presentation.**

B. Examination: ?

Examination	Description	Marks
Final Exam	A 3 hours written 2 papers composed of short essay and different types of MCQ, matching, complete, & data interpretations etc,	50%
clinical exam	OSCE ? Perform the clinical exam of one long case 2 short cases	25%
Oral exam	The student will examine in front of 2 different examiners (2 settings).	25%
Total		100%

List of references

- 6.1- Course notes :- paper and electronic
- 6.2- Essential books (text books)...i.e Crofton and Douglas's (5th edition)
- 6.3 - Periodicals, Web sites etc (Chest journal ,ERS journal and Thorax)
- Course specification for diploma in chest diseases, Al Azhar university, faculty of medicine for girls and Cairo university faculty of medicine

Teaching and learning facilities:

These include:

- I. **Lecture halls:** In the in the main library building of the El- Hussein Hospital., equipped with writing movable white board?, overhead and slide projectors and data show projector?.
- II. **Clinical rounds halls (in the El- Hussein and sayed galal Hospitals):** they are equipped with facilities to perform the required work.
- III. **Tutorial classes:** Held in the lecture halls?.
- IV. **Library:** In library building of the El- El- Hussein Hospital.

Course coordinator: prof. Ismael Abd Elmonem Attia
prof. Ahmad Aly Abonagla
Prof. Salem Mohammad Abo Sabea

Assistant coordinator: Assistant Prof. Ayman Amin
Dr. Ahmad El Shahat Kabil

Head of Department: prof. Ibrahim Abd Elfattah

Date: //