COURSE of

Chest diseases

For Master Degree

2013-2014
Course Specification for the Master in Chest Diseases

- **University:** AL-AZHAR
- **Faculty(s):** Faculty of Medicine, Cairo. Course Specifications Programme (s) on which the course is given: **Master 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 Master in Chest Diseases*
- **Code:** 07-700-Ms
- **Credit Hours:**
  - Total hours/week 10 hours 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 research skills
8) Develop problem-solving skills
9) Stimulate lifelong learning
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:

<table>
<thead>
<tr>
<th>a.1</th>
<th>Understand etiology, epidemiology, pathophysiology, genetics, diagnosis, clinical features, investigations and management of respiratory disease</th>
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<tbody>
<tr>
<td>a.2</td>
<td>Demonstrate knowledge of common chest diseases, their clinical manifestations, including emergent situations and of investigative procedures to confirm their diagnosis</td>
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<tr>
<td>a.3</td>
<td>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)</td>
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<td>a.4</td>
<td>Describe the mode of action of commonly used drugs, their doses, side-effect/toxicity, indications and contra-indications and interactions</td>
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<tr>
<td>a.5</td>
<td>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.</td>
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<tr>
<td>a.6</td>
<td>Understand of basic facts, theories, of the chest and related subjects/fields</td>
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<td>a.7</td>
<td>Recognize the understanding Importance of environment and occupation in respiratory disease</td>
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<tr>
<td>a.8</td>
<td>Understand of Quality standards of the practice</td>
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<tr>
<td>a.9</td>
<td>Recognize the understanding of Basics and ethics of scientific research</td>
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</table>
### B- Intellectual skills

| b.1 | Interpretation of the laboratory data including sputum examination - Gram’s stain, AFB, cytology including malignant cells |
| 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
1. Development and Structure
2. Functions of the Lung
3. Epidemiology
4. Lung Defences and Immunology
5. Genetics of Lung Disease
6. Clinical Aspects
7. Diagnostic Imaging
8. Minimally Invasive Diagnostic Procedures
9. Drugs in Lung Disease
10. Smoking
11. Air Pollution
12. Acute Upper Respiratory Tract Infection
13. Pneumonia
14. Empyema
15. Lung Abscess
16. Tuberculosis: Pathogenesis, Epidemiology and Prevention
17. Pulmonary Tuberculosis: Clinical Features
18. Extra-Pulmonary Tuberculosis
19. Management of Tuberculosis
20. Opportunistic Mycobacterial Disease
21. Actinomycotic and Fungal Diseases
22. Parasitic Diseases
23. Chronic Bronchitis and Emphysema
24. Respiratory Failure
25. Pulmonary Embolism
26. Pulmonary Hypertension
27. Pulmonary Oedema and Adult Respiratory Distress Syndrome
28. Bronchiectasis
29. Bronchiolar Disease
30. Cystic Fibrosis
31. Pulmonary Fibrosis
32. Asthma: Epidemiology
33. Asthma: Cellular and Humoral Mechanisms
34. Asthma: Clinical Features
35. Asthma: Management
36. Reactive Airways Dysfunction Syndrome
37. Hypersensitivity Lung Diseases
38. Pulmonary Eosinophilias
39. Sarcoidosis
40. Pulmonary Lymphocytic Angiitis and Granulomatosis
41. Lung Cancer
42. Other Pulmonary Neoplasms and Related Conditions
43. Diseases of the Pleura
44. Pneumothorax
45. Chest Wall and Neuromuscular Disorders
46. Abnormalities and Diseases of the Diaphragm
47. Sleep Apnoea/Hypopnoea Syndrome
48. Hyperventilation Syndromes
49. Diseases of the Mediastinum
50. Developmental Disorders of the Lungs
51. Less Common Pulmonary Diseases
52. Respiratory Infection in the Immunosuppressed
53. Pulmonary Manifestations of Systemic Disease
54. Occupational Lung Diseases
55. Drug-induced Lung Disease, Oxygen Toxicity and Related Syndromes
56. Some Paediatric Influences on Adult Lung Disease
57. Diving and the Lung
58. Assisted Ventilation
59. Lung Transplantation
60. Terminal Care in Respiratory Disease
61. Medicolegal Aspects of Lung Disease

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: ?

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

### 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 master degree 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 coordinators: prof. Ismael Abd Elmonem Attia
prof. Ahmad Aly Abonagla
Prof. Salem Mohammad Abo Sabea

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

Head of Department: prof. Ibrahim Abd Elfattah
Date: //