

## Peer Revision

<b>Reviewers</b>	<b>University</b>	<b>Date of Revision</b>
- Prof. Dawlat Salem	Cairo	10/12/2011
- Prof. Ahmad K. Mansur	Mansura	28/11/2011

# Program Specification of medical Doctorate Degree of Chest Diseases and Tuberculosis

Sohag University

Faculty of Medicine

## A. Basic Information

### B. Program title: MD in Chest Diseases and Tuberculosis

1. Program type: Single
2. Faculty: Faculty of Medicine
3. Department: Chest Diseases and Tuberculosis
4. Coordinator: Dr. Mona Taha Hussein, assistant professor at Chest Department, Sohag Faculty of Medicine, Sohag University.
5. **Ass. Coordinator:** Hend Mohammed Abd-Elraheem, lecturer at Chest Department, Sohag Faculty of Medicine, Sohag University.
6. **External evaluator:** Professor/ Gamal Mohammed Rabie , Professor of Chest diseases , Assuit University and Professor/Hoda Ahmed Makhoulf , Professor of Chest diseases , Assuit University
7. Last date of program specifications approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018.

### C. Professional Information

#### 1. Program Aims

The aim of this program is to provide the postgraduate with the advanced medical knowledge and skills essential for the mastery of practice of Chest Diseases and Tuberculosis and necessary to provide further training and practice in the field of Chest Diseases and Tuberculosis through providing:

1. Recent scientific knowledge essential for the mastery of practice of Chest Diseases and Tuberculosis according to the international standards.
2. Skills necessary for proper diagnosis and management of patients in the field of Chest Diseases and Tuberculosis including diagnostic, problem solving and decision making.
3. Ethical principles related to the practice in this specialty.
4. Active participation in community needs assessment and problems identification.
5. Maintenance of learning abilities necessary for continuous medical education.
6. Upgrading research interest and abilities.

#### 2. Attributes of the post graduate:

1. Efficient in carrying out the basics and methodologies of scientific research in Chest Medicine and Tuberculosis.
2. The continuous working to add new knowledge in his field.



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#### 1. Program Aims

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3. Ethical principles related to the practice in this specialty.
4. Active participation in community needs assessment and problems identification.
5. Maintenance of learning abilities necessary for continuous medical education.
6. Upgrading research interest and abilities.

#### 2. Attributes of the post graduate:

1. Efficient in carrying out the basics and methodologies of scientific research in Chest Medicine and Tuberculosis.
2. The continuous working to add new knowledge in his field.

3. Applying the analytical course and critical appraisal of the knowledge in his specialty and related fields.
4. Merging the specialized knowledge with the other related knowledge with conclusion and developing the relationships in between them.
5. Showing a deep awareness with the ongoing problems, theories, and advanced sciences in his specialty.
6. Determination of the professional problems and creating solutions for them.
7. Efficient in carrying out the professional skills in his specialty.
8. Using advanced suitable technologies which serves his practice.
9. Efficient communication and leadership of team work in his specialty.
10. Decision making through the available information.
11. Using the available resources efficiently and working to find new resources.
12. Awareness with his role in the development of the society and preserve environment.
13. Behaving in a way which reflects his credibility, accountability, and responsibility.
14. Keeping continuous self development and transfer his experiences and knowledge to others.

### 3. **intended learning outcomes (ILOs)**

#### a) **Knowledge and Understanding**

By the end of the study of doctoral program in Chest Diseases and Tuberculosis the Graduate should be able to:

- a1. Mention the recent advances in the understanding of normal structure and function of the lungs and other organs that functionally related to the thoracic medicine specialty on the macro and micro levels.
- a2. List the recent advances in the description of normal growth and development of these organs.
- a3. List the recent advances in the diagnosis of abnormal structure, function, growth and development of these organs and natural history of common diseases.
- a4. Mention the recent advances in the causation of different respiratory diseases and their pathogenesis. for example genetic base and environmental interaction in causation of important thoracic problems as COPD and Lung Cancer.
- a5. Define the recent methods of promoting health and preventing illness. for example Pulmonary Rehabilitation and Smoking Cessation,
- a6. Illustrate the recent advances in the scientific methods of establishing disease causation.
- a7. Write established and updated items in clinical picture and differential diagnosis of common illnesses related to thoracic medicine specialty
- a8. Define the recent advances in diagnostic and laboratory techniques necessary to establish diagnosis of common illnesses related to respiratory medicine
- a9. Mention recent updates in the various therapeutic methods/alternatives used for common pulmonary diseases.

- a10. List principles, methodologies, tools and ethics of scientific research .
- a11. Mention the principles and fundamentals of ethics and legal aspects of professional practice in the field of thoracic medicine
- a12. Explain the principles and fundamentals of quality assurance of professional practice in the field of chest diseases and tuberculosis
- a13. Mention the effect of professional practice on the environment and the methods of environmental development and maintenance. For example the new trends in replacing the currently used propellants in inhalers to more environmental friendly ones.
- a14. Describe the recent advances in biostatistics and computer.

**b) Intellectual skills**

By the end of the study of doctoral program in Chest Diseases and Tuberculosis the Graduate should be able to:

- b1. Interpret data acquired through history taking to reach a provisional diagnosis for respiratory illness
- b2. Suggest from different diagnostic alternative techniques the ones that help in reaching a final diagnosis for thoracic problems.
- b3. Formulate research studies that add to knowledge.
- b4. Formulate scientific papers in the area of Chest Diseases and Tuberculosis specialty.
- b5. Measure risk in professional practices in the field of Chest Diseases and Tuberculosis.
- b6. Plan to improve performance in the field of thoracic medicine.
- b7. Identify problems and find solutions based on the available data in chest diseases.
- b8. Have the ability to innovate nontraditional solutions to chest diseases problems.
- b9. Manage scientific discussion administration based on scientific evidences and proofs.
- b10. Criticize researches related to Chest Diseases and Tuberculosis specialty.
- b11. Collect and verify data from different sources
- b12. Analyze and interpret the results of research using common statistical tests.
- b13. Interpret, criticize and make a scientific conclusion(s) from published research studies.

**c) Professional and Practical skills**

By the end of the study of doctoral program in Chest Diseases and Tuberculosis the Graduate should be able to:

- c1. Perform physical examination of patients for all organs and structures related to Chest specialty.
- c2. Collect the results of diagnostic procedures.
- c3. Perform the diagnosis of common illnesses.
- c4. Preserve the patients with life threatening conditions and initiate the proper management according to patient's needs.
- c5. Design a treatment prescription and medical reports.
- c6. Evaluate and develop methods and tools existing in the area of Chest specialty.
- c7. Perform bronchoscopic and imaging evaluation related to chest specialty.
- c8. Train junior staff through continuous medical education programs.
- c9. Design new methods, tools and ways of professional practice.
- c10. Perform recent advanced technological methods in collection, analysis and interpretation of data of patients

c11. Master the basic and modern professional skills in the area of Chest specialty.

**d) General and Transferable skills**

By the end of the study of doctoral program in Chest Diseases and Tuberculosis the Graduate should be able to:

- d1. present reports in seminars effectively
- d2. Use standard computer programs effectively
- d3. Teach others and evaluate their performance.
- d4. Assess himself/herself and identify his personal learning needs.
- d5. Use of different sources for information and knowledge.
- d6. Work coherently and successfully as a part of team and team`s leadership.
- d7. Manage scientific meetings according to the available time.

**4. Academic standards**

Sohag faculty of medicine adopted the general national academic reference standards (NARS) proved by the national authority for quality assurance and accreditation of education (NAQAAE) for postgraduate programs. This was approved by the Faculty Council decree No.6854, in its cession No, 177 Dated: 18/5/2009. Based on these NARS; Academic Reference Standards (ARS) were suggested for this program. These ARS were revised by external evaluator approved by the Faculty Council decree No.7528, in its cession No.191 dated 15/3/2010. The adoption of NARS and the suggested ARS were approved by University council degree No 587, in its cession No.60. dated 26-12-2011.

**5. Curriculum Structure and Contents**

5.a- Program duration: 7 semester (3.5years)

5.b- Program structure

5.b.i- No. of hours per week:

Subject	hours /week		
	Lectures	Practical	Clinical
<u>First Part:</u>			
Research Methodology	2	2	
Bio Statistics & Computer	2	2	
Primary medical report	1	2	
Medical Physiology	1		
Pathology	2		
Microbiology	2		
Basic immunology &Molecular biology	2		
<u>Second Part:</u>			
Chest diseases & Tuberculosis	6.5	6.5	6.5

code	Item	No	%	
b.i	Total credit hours	Compulsory	90	100
		Elective	0	0
		Optional	0	0

b.iii	credit hours of basic sciences courses	7	7.8
b.iv	credit hours of courses of social sciences and humanities	0	0
b.v	credit hours of specialized courses:	52	57.8
b.vi	credit hours of other course	8	8.9
b.vii	Practical/Field Training	8	8.9
b.viii	Program Levels (in credit-hours system):		
	Level 1: 1 <sup>st</sup> part	15	16.7
	Level 2: 2 <sup>nd</sup> Part	52	57.8
	Level 3: Thesis	15	16.7

## 6. Program courses

**8 courses are compulsory**

### 4d. Level of Program

**Semester...1.....**

**First part:**

#### **Compulsory**

Course Title	Total No. of credit hours	No. of hours /week			Program ILOs Covered (By No.)
		Lect.	Lab.	clinical	
Research methodology	3	2	2		a10,13 ,b1,3,4,10,13,c9,11,d5,6
Biostatistics + computer	3	2	2		a14,b11,12,c10,d2,5
Primary medical report	2	1	2		a7,10,11,12,13,b1,7,9,10, c2,5,d1,5,6,7
Medical Physiology	1	1			a1,4,b6,c3,d5
Pathology related to Chest diseases.	2	2			a3,4,6,7,b1,7,8,c1,3,4,d5
Microbiology	2	2			a3,5,6,7,8,9,b1,2,c2,3,9,d 1,2,5
Basic immunology & molecular biology	2	2			a1,2,6,8,b2,7,c2,9,d1,2,5
<b>Second part</b>					
Chest Diseases and Tuberculosis	52	6.5	6.5	6.5	a4,6,7,8,9,12,b1,2,5,6,7,8 ,9,c1,2,3,4,5,6,7,8,9,d1,3, 4,5,6,7

## 7. **Program Admission Requirements**

### **I- General Requirements.**

- Candidate should have either MBBch degree from any Egyptian Faculty of Medicine or Equivalent Degree from Medical Schools abroad approved by the ministry of high Education.
- Candidate should know how to speak & write English well
- Candidate should have computer skills.
- Follow postgraduate bylaw Regulatory rules of Sohag Faculty of Medicine approved by the ministerial decree No. (44), dated 6/1/2010.

### **II- Specific Requirements**

- Master degree in Chest Diseases and Tuberculosis with at least "Good Rank".

## 8. Regulations for Progression and Program Completion

Duration of program is 90 credit hours ( $\geq 7$  semesters  $\geq 3.5$  years), starting from registration till acceptance of the thesis; divided to:

### First Part: (15 Credit hours $\geq 6$ months $\geq 1$ semester):

- Program-related basic science, Research Methodology, Ethics & medical reports, Biostatistics and computer.
- At least six months after registration should pass before the student can ask for examination in the 1<sup>st</sup> part.
- Two sets of exams: 1st in October — 2nd in April after fulfillment of the credit hours.
- At least 60% of the written exam and 60% of the total oral and practical/clinical is needed to pass in each course.
- For the student to pass the first part exam, a score of at least 60% (Level D) in each course is needed.
- Those who fail in one course need to re-exam it only.
- GPA of  $\geq 1.3$  is needed to pass this level (semester).

### Second Part: (50-60 Credit hours $\geq 24$ months = 4 semesters):

- Program related specialized science of Chest Diseases and Tuberculosis courses. At least 24 months after passing the 1<sup>st</sup> part should pass before the student can ask for examination in the 2<sup>nd</sup> part.
- Fulfillment of the requirements in each course as described in the template and registered in the log book (8 Credit hours; with obtaining  $\geq 75\%$  of its mark) is a prerequisite for candidates to be assessed and undertake part 1 and part 2 examinations; the credit hours of the logbook are calculated as following:
  - Each Cr. Hr. = 60 working Hrs.
  - Logbook = 8 Cr. Hr. X 60 working Hrs = 480 Working Hrs.
  - Collection of working Hrs. is as following:

Activity		Hrs
Grand rounds	اجتماع علمي موسع	٦
Training courses	دورات تدريبية	12/ day
Conference attendance	حضور مؤتمرات علمية	١٢/day
	داخلي خارجة	18/day
Thesis discussion	حضور مناقشات رسائل	٦
Workshops	حضور ورش عمل	١٢/day
Journal club	ندوة الدوريات الحديثة	٦
Seminars	لقاء علمي موسع	٦
Morbidity and Mortality conference	ندوة تحليل المخاطر المرضية أوالوفاة	٦
Self education program	برنامج التعليم الذاتي	٦

- Two sets of exams: 1st in October - 2nd in April.



- At least 60% of the written exam is needed to be admitted to the oral and practical exams.
- 4 times of oral and practical exams are allowed before the student has to re-attend the written exam.

**Third Part (Thesis) (15 Credit hours =24-48 months=4-8 semester):**

- Documentation of the subject should not be delayed for > 1.5 years after registration.
- Could start after registration and should be completed, defended and accepted after passing the 2nd part final examination, after passing of at least 24 months after documentation of the subject of the thesis and after publishing of at least one paper from the thesis in a specialized peer-reviewed journal.
- Accepting the thesis is enough to pass this part.

**9. Methods of student assessments:**

Method of assessment	weight	The assessed ILOs
1-Research assignment		- General transferable skills, intellectual skills
2-Written Exams: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	50%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills
3-OSCE/ OSPE	50%	-Practical skills, intellectual skills, general transferable skills
4-Structured Oral Exams		- Knowledge, Intellectual skills, General transferable skills

**Assessment schedule:**

Part I:

- Biostatistics & Computer: Written Exam (2 hours) + Structured oral Exam+ OSPE
- Research Methodology: Written Exam (2 hours) + structured oral Exam+ OSPE
- Primary medical reports: Written Exam (2 hour) + Structured oral Exam+ OSPE
- Medical Physiology: Written Exam (2 hours) + structured oral Exam
- Pathology: Written Exam (3 hours) + structured oral Exam.
- Medical Microbiology, Immunology and Molecular Biology: Written Exam (3 hours) + structured oral Exam.

Part II:

- Chest Diseases & Tuberculosis: Two Written Exams (3 hours for each) + one written exam containing commentary (1.5 hours) + OSCE + Structured oral Exam.

**10. Evaluation of Program**

Evaluator	Tool	Sample
1- Senior students	Questionnaire	6
2- Alumni	Questionnaire	4
3- Stakeholders ( Employers)	Questionnaire	40
4-External Evaluator(s) - (External Examiner(s))	Reports	1
5- Other		5

## Course Specification of Applied Biostatistics and Computer use in MD degree in Chest Diseases and Tuberculosis

Sohag university

Faculty of Medicine

1. Program on which the course is given: MD Degree of Chest Diseases and Tuberculosis
2. Major or minor element of program: minor
3. Department offering the program: Chest Diseases and Tuberculosis
4. Department offering the course: Community Medicine and public Health Department
5. Academic year/ Level: first part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018.

### A. Basic Information

**Title:** Applied biostatistics (with computer use) in MD degree in Chest Diseases and Tuberculosis

**Code: COM 0503-300**

Title	Lecture	Practical	Total	Credit
biostatistics with computer use	30	30	60	3

### B. Professional Information

#### 1. Overall Aims of Course

To use precisely medical biostatistics and computer programs

#### 2. Intended Learning Outcomes of Courses (ILOs)

##### a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. List different programs of analysis of data and statistical packages
- a2. Define the recent advances of sources of data and methods of collection.
- a3. Summarize data, construct tables and graphs
- a4. Calculate measures of central tendency and measures of dispersion
- a5. Describe the normal curves and its uses
- a6. Illustrate selected tests of significance and the inferences obtained from such tests
- a7. Illustrate selected tests of significance for parametric and non parametric inferences
- a8. Identify factor analysis and discrimination analysis

##### b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

- b1. Understand how to Collect and verify data from different sources
- b2. Analyze and interpret the results of research using common statistical tests.

##### c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:  
 c1. Perform recent advanced technological methods in collection, analysis and interpretation of data of patients

**d) General and Transferable Skills:**

By the end of the course, the student is expected to be able to:

- d1. Use appropriate computer program packages.
- d2. Use of different sources for information and knowledge about biostatistics.

**3. Contents**

Topic	No. of hours	Lecture	Tutorial/ Practical
Recent advances in collection, analysis and interpretation of data	6	3	3
-Details of Tests of significance: Proportion test	6	3	3
Chi-square test	6	3	3
Student T test	6	3	3
Paired T test	6	3	3
-Correlation	4	2	2
-Regression	6	3	3
-ANOVA test	4	2	2
-Discrimination analysis	6	3	3
Factor analysis	4	2	2
- parametric and non parametric tests	6	3	3
<b>Total</b>	<b>60</b>	<b>30</b>	<b>30</b>
<b>Credit</b>	<b>3</b>	<b>2</b>	<b>1</b>

**4. Teaching and Learning Methods**

- 4.1- Lectures
- 4.2- Practical sessions
- 4.3- Computer search assignments
- 4.4- Computer application

**5. Student Assessment Methods**

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Intellectual skills, Knowledge, General transferable skills
5.4Computer search assignment	-General transferable skills, intellectual skills

**Assessment Schedule**

Assessment 1.....	Final written exam	Week: 24
Assessment 2.....	Final Structured Oral Exam	Week: 24
Assessment 3	Attendance and absenteeism throughout the course	
Assessment 4	Computer search assignment performance throughout the course	

### Weighting of Assessments

Final-term written examination	50%
Final Structured Oral Exam	50%
Total	100 %

**Formative only assessments: attendance and absenteeism and Computer search assignments performance.**

### 6. List of References

#### **6.1- Essential Books (Text Books)**

1-Maxy-Rosenau Public health and preventive medicine, 2008.,Robert Wallace, publisher McGraw-Hill Medical; 15 edition.

#### **6.2- Recommended Books**

1- Dimensions of Community Based projects in Health Care, 2018. Arxer, Steven L., Murphy, John W.; 1st edition.

2- Parks Text Book of Preventive & Social Medicine. 2017., K. Park. BanarsidasBhanot Publishers; 23 edition.

3- Clinical Epidemiology: The Essentials, 2013, Robert F., Suzanne W. Fletcher, Grant S., publisher Lippincott Williams & Wilkins; 5 edition.

#### **6.3- Periodicals, Web Sites, ...etc**

1-American Journal of Epidemiology

2-British Journal of Epidemiology and Community Health

3- WWW. CDC and WHO sites

### 7. Facilities Required for Teaching and Learning:

1. ADEQUATE INTRASTRUCTURE: including teaching places (teaching class), comfortable desks, good source of aeration, bathrooms, good illumination and safety and security
2. Teaching tools: including screens, computers data shows, projectors, flip charts, white board, video player, digital video camera, scanner, copier, colour and laser printers.

**Course Coordinator:** Dr. Foad Metry Atya

**Head of Department:** Prof / Ahmed FAthy Hammed

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013, **Revised:**1/12/2018

## Course Specifications of Research methods for health services (with computer use) in MD degree in Chest Diseases and Tuberculosis

Sohag university

Faculty of Medicine

1. Program on which the course is given: MD Degree of Chest Diseases and Tuberculosis
2. Major or minor element of program: Minor
3. Department offering the program: Chest Diseases and Tuberculosis
4. Department offering the course: Community Medicine and public Health department
5. Academic year/ Level: first part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018.

### A. Basic Information

**Title:** Research methods for health services in MD degree in Chest Diseases and Tuberculosis

**Code:** COM 0503-300

Title	Lecture	Practical	Total	Credit
Research methods	30	30	60	3

### B. Professional Information

#### 1. Overall Aims of Course

1. To influence the students to adopt an analytical thinking for evidence based medicine
2. To use precisely the research methodology in researches

#### 2. Intended Learning Outcomes of Courses (ILOs)

##### a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. Define the recent advances of screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests.
- a2. Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values.
- a3. Describe the study design, uses, and limitations.
- a4. Mention the recent advances of principles, methodologies, tools and ethics of scientific research.
- a5. Explain the strategies and design of researches.
- a6. List bias and confounding.
- a7. Mention sampling techniques and list advantages of sampling
- a8. List principles of evidence based medicine.

##### b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

- b1. Conduct research studies that add to knowledge.
- b2. Formulate scientific papers in the area of Chest Diseases and Tuberculosis specialty.
- b3. Criticize researches related to Chest Diseases and Tuberculosis specialist.

##### c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

c1. Master the basic and modern professional skills in conducting researches in Chest Diseases and Tuberculosis specialist

c.2 Design new methods, tools, and ways of professional practice.

**d) General and Transferable Skills:**

By the end of the course, the student is expected to be able to:

d1. Use of different sources for information and knowledge to serve research.

d2. Work coherently and successfully as a part of a team and team's leadership in conducting researches and field studies.

**3. Contents**

<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Tutorial/ Practical</b>
Details of epidemiological studies (case control, cohort and cross sectional )	8	4	4
Clinical trials, Quasi experimental study	6	3	3
Bias and errors	6	3	3
Setting a hypothesis	6	3	3
Recent advances in screening	6	3	3
Evidence – based Medicine: Concept and examples	4	2	2
Applicability	4	2	2
Scientific writing: A protocol	4	2	2
A curriculum	4	2	2
Setting an objective	2	1	1
Critical thinking	2	1	1
Formulation of papers	8	4	4
<b>Total</b>	<b>60</b>	<b>30</b>	<b>30</b>
<b>Credit hours</b>	<b>3</b>	<b>2</b>	<b>1</b>

**4. Teaching and Learning Methods**

4.1- Lectures.

4.2- Computer search assignments

**5. Student Assessment Methods**

<b>Method of assessment</b>	<b>The assessed ILOs</b>
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Intellectual skills, Knowledge, General transferable skills
5.4Computer search assignment	-General transferable skills, intellectual skills

## Assessment Schedule

Assessment 1	Final written exam	Week: 24
Assessment 2	Final Structured Oral Exam	Week: 24
Assessment 3	Attendance and absenteeism throughout the course	
Assessment 4	Computer search assignment performance throughout the course	

## Weighting of Assessments

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Final Structured Oral Exam	50%
Total	100 %

**Any formative only assessments** Attendance and absenteeism throughout the course  
Computer search assignment performance throughout the course

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## 7. Facilities Required for Teaching and Learning:

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2. Teaching tools: including screens, computers data shows, projectors, flip charts, white board, video player, digital video camera, scanner, copier, color and laser printers

**Course Coordinator:** Dr. Foad Metry Atya

**Head of Department:** Dr / Ahmed Fathy Hammed

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013, **Revised:**1/12/2018

## Course Specifications of Primary Medical Reports in MD Chest Diseases and Tuberculosis

**Sohag University**

**Faculty of Medicine**

1. Program on which the course is given: MD Degree of Chest Diseases and Tuberculosis
2. Major or minor element of program: minor
3. Department offering the program: Chest Diseases and Tuberculosis
4. Department offering the course: Forensic Medicine and Clinical Toxicology department
5. Academic year/ Level: first part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018.

### A. Basic Information

**Title:** Course Specifications of Primary medical reports in MD Chest Diseases and Tuberculosis

**Code: FOR 0503-300**

Title	lecture	practical	Total	Credit
Primary medical reports	۱۰	30	45	<b>2</b>

### B. Professional Information

#### 1. Overall Aims of Course

1. Describe principles of toxicology of different types of poisonous substances and drugs which operate on human body including classification, mechanism of action, clinical features of toxicity, circumstances and diagnosis
2. Describe general management of poisoned patient (alert and comatose) and antidotal measures for different drugs and toxic substances.
3. Provide basic knowledge of different medico legal aspects of medical practice.
4. Provide basic knowledge of medical ethics and malpractice.
5. Describe the theories and principles that govern ethical decision-making, especially of the major ethical dilemmas in medicine.

#### 2. Intended Learning Outcomes of Course (ILOs):

##### a) Knowledge and Understanding:

By the end of the course the student is expected to:

- a1. Mention the diagnosis of poisoning and describe principles of toxicological sampling
- a2. List principles, methodologies, tools and ethics of scientific research
- a3. Mention medico legal aspects of organ transplantation, intersex states, euthanasia, assisted reproduction techniques and ethical considerations of medical research involving human subjects
- a4. Enumerate principles of toxicology of different types of poisonous substances and drugs which operate on human body including classification, mechanism of action, clinical features of toxicity, circumstances, diagnosis and clinical management
- a5. Mention the obligation of physicians (towards patients, colleagues, community)



**b) Intellectual Skills:**

By the end of the course the student is expected to:

- b1. Interpret the features of different types of poisonous plant for proper diagnosis and management
- b2. Interpret features of a case study of poisoning to solve the problem
- b3. Manage Scientific discussion based on scientific evidences and proofs.
- b4. Criticize researches related to Chest Diseases and Tuberculosis specialty.

**c) Professional and Practical Skills:**

By the end of the course the student should be able to:

- c1. Identify and write standard medical report about a case of poisoning through interpretation of history, clinical examination and laboratory test findings of poisoned patients in admission units of different hospitals.
- c2. Design a treatment prescription and write death certificate

**d) General and Transferable Skills:**

By the end of the course, students should be able to:

- d1. Present orally a toxicological report in accordance with the standard scientific guidelines in seminars
- d2. Use of different sources for information and knowledge.
- d3. Communicate with each others and interact effectively and ethically with patients
- d4. Manage scientific meetings according to the available time.

**3. Contents of the Course:**

<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>practical</b>
Definition of poison, classification of poison and factors that influence toxicity	3.75	1.25	2.5
Diagnosis & Management of poisoning including: respiratory support, circulatory support and neurological support	3.75	1.25	2.5
toxicological sampling and permanent infirmity	3.75	1.25	2.5
How to write a toxicological report & How to write death certificate	3.75	1.25	2.5
Obligation of physicians (towards patients, colleagues, community)	3.75	1.25	2.5
Consent, and professional secrecy	3.75	1.25	2.5
Types of malpractice, and items of medical responsibility	3.75	1.25	2.5
Medicolegal aspects of organ transplantation, intersex states, euthanasia, assisted reproduction techniques	3.75	1.25	2.5
Ethical considerations of medical research involving human subjects	3.75	1.25	2.5
<b>Total hours</b>	<b>45</b>	<b>15</b>	<b>30</b>
<b>Total credit hours</b>	<b>2</b>	<b>1</b>	<b>1</b>

#### **4. Teaching and Learning Methods:**

4.1- Lectures

4.2- Practical sessions with demonstration of specimens and photographs,

#### **5. Student Assessment Methods**

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills

#### **Assessment Schedule**

**Assessment 1:** One written exam by the end of the course Week 24

**Assessment 3:** Final Structured Oral Exam by the end of the course Week 24

#### **Weighting of Assessments**

Final-term written examination	50%
Structured Oral Examination	50%
Total	100%

Formative only assessments: attendance and absenteeism

#### **6. List of References**

##### **Essential books**

Simpson's Forensic Medicine, 13th Edition, by Jason Payne-James, Richard Jones, Steven B Karch, John Manlove. published by Hodder & Stoughton Ltd (2011).

Goldfrank's Toxicologic Emergencies, (9th ed.) by Lewis S. Nelson, Robert S. Hoffman, Mary Ann Howland, Neal A Lewin, Lewis R. Goldfrank, Neal E. Flomenbaum. Published by McGraw-Hill (2011)

Emergency Toxicology, Peter Viccellio, (2nd ed.) Published by Lippincott Williams & Wilkins (1998)

##### **Recommended books**

Medical ethics. (1997) Robert M Veatch. 2nd edition. Jones & Bartlett publishers

##### **Periodicals and websites.....etc.**

Egyptian journals of forensic medicine and clinical toxicology

International journals of forensic medicine and clinical toxicology

[www.sciencedirect.com](http://www.sciencedirect.com)

<https://emedicine.medscape.com>

<https://www.ncbi.nlm.nih.gov/pmc/>

#### **7. Facilities Required for Teaching and Learning:**

1. ADEQUATE INTRASTRUCTURE: including teaching places (teaching class), comfortable desks, good source of aeration, bathrooms, good illumination and safety and security

2. Teaching tools: including screens, computers data shows, projectors, flip charts, white board, video player, digital video camera, scanner, copier, color and laser printers.

**Course Coordinator:** Dr. Soheir Ali Mohamed

**Head of Department:** Dr. Soheir Ali Mohamed

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013, **Revised:**1/12/2018

## Course specification of Medical Physiology in MD Degree of Chest Diseases and Tuberculosis

Sohag University

Faculty of medicine

1. Program on which the course is given: MD Degree of Chest Diseases and Tuberculosis
2. Major or minor element of program: Minor
3. Department offering the program: Chest Diseases and Tuberculosis
4. Department offering the course: Medical Physiology
5. Academic year/ Level: first part
6. Date of specification approval: Faculty council No: 219, decree No. (8115) dated: 19/12/2011, re-approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018.

### A. Basic information

**Title:** Course specification of Medical Physiology in MD Degree of Chest Diseases and Tuberculosis

**Code:** PHY 0503-300

Module	Lecture	Practical:	Total:	Credit
Medical Physiology Module	10		10 hrs	1

### B. Professional information

#### 1. Aim of the Course :

To prepare a chest physician oriented with the Medical Physiology of the respiration including that concerned with lung compliance, surfactant, lung volumes & capacities. In addition, graduates should have enough knowledge about the regulation of respiration & gas exchange including O<sub>2</sub> & CO<sub>2</sub> carriage in the blood also it's very important to study the acid base balance & pulmonary circulation and as all physicians they should know the mechanism of fever and how to control.

#### 2. Intended Learning Outcomes (ILOs):

##### a) **Knowledge and Understanding:**

By the end of the course the student should be able to:

- a1. Mention the recent advances the Medical Physiology of respiration and the Medical Physiology of the acid base balance and fever and its mechanisms.
- a2. List the recent advances in the causation of disease.

##### b) **Intellectual skills:**

By the end of the course, the students is expected to be able to :

- b1. Conduct research studies that add to knowledge.

##### c) **Professional and practical skills:**

By the end of the course, the students is expected to be able to

- c1. Perform bronchoscopic and imaging evaluation related to chest specialty.

##### d) **General and Transferable Skills:**

By the end of the course, the students is expected to be able to:

- d1. Assess himself/herself and identify his personal learning needs.
- d2. Manage scientific meetings according to the available time.

### 3. Contents of the Course:

Topic	No. of hours	Lecture	Practical
Mechanism of respiration	1 hr	1 hr	
Lung compliance	1 hr	1 hr	
Surfactant	1 hr	1 hr	
Work of breathing	1 hr	1 hr	
Lung volumes & capacities	1 hr	1 hr	
Gas exchange in the lung.	1 hr	1 hr	
O <sub>2</sub> carriage by the blood.	1 hr	1 hr	
CO <sub>2</sub> transport by the blood	1 hr	1 hr	
Regulation of respiration	1 hr	1 hr	
Acid base balance	1 hr	1 hr	
Endocrine & metabolic functions of the lungs.	2 hr	2 hr	
Pulmonary circulation.	1 hr	1 hr	
Effects of autonomic nerves on respiratory functions.	1 hr	1 hr	
Fever & its mechanisms	1 hr	1 hr	
<b>Total</b>	<b>15</b>	<b>15</b>	
<b>Total credit hours</b>	<b>1</b>	<b>1</b>	

### 4. Teaching & Learning Methods:

4.1 Lectures

4.2 Practical lessons

### 5. Student Assessment Methods :

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills

### ASSESSMENT SCHEDULE:

- 1- Assessment 1: written examination week 24
- 2- Assessment 2: Structured Oral Exam week 24
- 3- Assessment of attendance & absenteeism throughout the course

### WEIGHTING OF ASSESSMENTS:

Final-term written examination	50%
Structured Oral Exam	50%

Total	100%
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Formative only assessments: attendance and absenteeism

**6. List of references:**

**6.1 Essential books (textbooks)**

Gyton textbook of Medical Physiology

**6.2- Recommended Books**

**6.3 Periodicals**

American journal of Medical Physiology

Journal of applied Medical Physiology

**7. Facilities Required for Teaching and Learning:**

1- ADEQUATE INTRASTRUCTURE: including teaching places (teaching class), comfortable desks, good source of aeration, bathrooms, good illumination and safety and security

2- Teaching tools: including screens, computers data shows, projectors, flip charts, white board, video player, digital video camera, scanner, copier, color and laser printers.

**Course Coordinator:** Dr. Ahmed Moustafa

**Head of Department:** Dr: Hoda Moustafa Ahmed

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013, **Revised:**1/12/2018

# Course Specification of Pathology in MD degree in Chest Diseases and Tuberculosis

Sohag University

Faculty of Medicine

- 1- Program on which the course is given: MD Degree of Chest Diseases and Tuberculosis
- 2- Major or minor element of program: Minor
- 3- Department offering the program: Chest Diseases and Tuberculosis
- 4- Department offering the course: Pathology
- 5- Academic year/ Level: first part
- 6- Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018.

## A. Basic Information

**Program title** Course Specification of Pathology in MD degree in Chest Diseases and Tuberculosis

**Code** PAT 0503-300

Lecture	Practical:	Tutorial:	Total:	Credit
30hrs		30	30hrs	2

## B. Professional Information

### 1. Overall Aims of Course

By the end of the course the post graduate students should be able to have the professional knowledge of the pathology of medical diseases.

### 2. Intended Learning Outcomes of Course (ILOs):

According to the intended goals of the faculty

#### a) **Knowledge and Understanding:**

By the end of the course the student should be able to:

- a1. List the recent advances in the abnormal structure, function, growth and development of these organs and natural history of common diseases
- a2. Mention the recent advances in the causation of disease and disease pathogenesis.
- a3. Illustrate the recent advances in the scientific methods of establishing disease causation
- a4. Enumerate the fate and complications and prognosis of different diseases especially lung & mediastinal diseases.

#### b) **Intellectual Skills:**

By the end of the course the student should have the ability to:

- b1. Interpret in a professional manner a pathology report.
- b2. Conduct research studies that add to knowledge.
- b3. Identify pathological problems and find solution.

#### c) **Professional and Practical Skills:**

By the end of the course the student should have the ability to:

- c1. Identify the macroscopic and microscopic criteria of the altered structure (pathology) of the body and its major organs and systems that are seen in various diseases.
- c2. Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, and degenerative) and mechanisms of diseases and the way through which they operate in the body (pathogenesis).
- c3. Perform bronchoscopic evaluation related to chest specialty through identify macroscopic and microscopic criteria of the altered structure.

**d) General and Transferable Skills:**

By the end of the course the student should have the ability to:

- d1. Write a report commenting on a pathological specimen.
- d2. Use Effectively various computer based instruction tools and E-learning of Pathology and utilize a variety of computer-based self assessment tools.
- d3. Use the sources of biomedical information to remain current with the advances in knowledge and practice.

**3. Course Contents:**

Topic	No. of hours	Lecture	Practical
<u>1- General Pathology:</u>	10	10	
1.1. Inflammation & repair.	1	1	
1.2. Cell response to injury and aging.	1	1	
1.3. Disturbances of circulation.	1	1	
1.4. Immunity and hypersensitivity.	1	1	
1.5. Bacterial infection and tuberculosis.	1	1	
1.6. Viral and rickettsial diseases.	1	1	
1.7. Parasitic diseases and mycotic diseases	1	1	
1.8. Disturbances of cellular growth.	1	1	
1.9. General pathology of tumors.	1	1	
1.10. Diagnostic cytology.	1	1	
<u>2- Respiratory system:</u>	16	16	
2.1. Bronchitis, bronchiectasis.	2	2	
2.2. Bronchial asthma & emphysema.	2	2	
2.3. Lung abscess.	2	2	
2.4. Pneumonias.	2	2	
2.5. Pneumoconiosis.	2	2	
2.6. Tumors of the lung.	2	2	
2.7. Pleural effusion and empyema.	1	1	
2.8. Hemoptysis.	1	1	
2.9. Pneumothorax & pyopneumothorax.	1	1	
2.10. Tumors of pleura.	1	1	
<u>3- Diseases of the heart.</u>	1	1	
3.1. Pulmonary hypertension & lung congestion.	1	1	
<u>4- Diseases of mediastinum:</u>	3	3	
4.1. Mediastinitis	1	1	
4.2. Mediastinal lymphoma.	1	1	
4.3. Thymoma	1	1	
<b>Total</b>	<b>30</b>	<b>30</b>	
<b>Total credit hours</b>	<b>2</b>	<b>2</b>	



#### 4. Teaching and Learning Methods

4.1. Lectures.

#### 5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills

#### Assessment Schedule

Assessment 1	Written examination	week 24
Assessment 2	Structured Oral Exam	week 24
Assessment 3	Attendance and absenteeism	

#### Weighting of Assessments

Final-term Written Examination	50%
Structured Oral Exam	50%
Total	100%

Formative only assessments: attendance and absenteeism

#### 6. List of References

##### 6.1- Essential Books (Text Books):

- Muir's text book of pathology, 15<sup>th</sup> edition, 2014
- Robbins pathologic basis of diseases, 10<sup>th</sup> edition, 2017

##### 6.2- Recommended Books:

- Rosi & Ackerman text book of pathology, 11<sup>th</sup> edition, 2017
- Sternberg text book of pathology, 6<sup>th</sup> edition, 2015

##### 6.3- Periodicals, websites:

American journal of pathology  
Pathology journal  
Human pathology journal

Web Sites: <http://www.ncbi.nlm.nih.gov/pubmed/>

#### 7. Facilities Required for Teaching and Learning:

1. ADEQUATE INTRASTRUCTURE: including teaching places (teaching class), comfortable desks, good source of aeration, bathrooms, good illumination and safety and security
2. Teaching tools: including screens, computers data shows, projectors, flip charts, white board, video player, digital video camera, scanner, copier, color and laser printers.

**Course Coordinator:** Dr. Eman Muhammad Salah El Deen

**Head of Department:** Dr. Afaf Al- Nashar

**Date:** 18/12/2011, **Revised:** 1/9/2012, **Revised:** 1/12/2013, **Revised:** 1/12/2018

## Course Specifications of Medical Microbiology in MD degree in Chest Diseases and Tuberculosis

**Sohag University**

**Faculty of Medicine**

- 1- Program on which the course is given: MD Degree of Chest Diseases and Tuberculosis
- 2- Major or minor element of program: minor
- 3- Department offering the program: Chest Diseases and Tuberculosis
- 4- Department offering the course: Medical Microbiology and Immunology Department
- 5- Academic year/ Level: first part
- 6- Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018.

### A. Basic Information

**Title:** Course Specifications of Medical Microbiology in MD degree in Chest Diseases and Tuberculosis

**Code MIC 0503-300**

Title	Lecture	Practical:	Total:	Credit
Medical Microbiology module	30		30	<b>2</b>

### B. Professional Information

#### 1- Overall Aims of Course

By the end of the course the postgraduate student should be efficiently able to have advanced knowledge of the microorganisms affecting human beings all over the world and particularly in Egypt, and learn to use the knowledge gained from applied microbiology to better understand the pathology, clinical symptoms, complications and the laboratory tests needed for diagnosis of each disease, in particular how to use microbiological testing in determining antibiotic prescription.

#### 2- Intended Learning Outcomes of Course (ILOs):

##### a) Knowledge and Understanding:

By the end of the course the student is expected to:

- a1. List the microorganisms affecting human beings all over the world and particularly in Egypt.
- a2. Enumerate the recent methods of promoting health and preventing illness
- a3. Illustrate the recent advances in the scientific methods of establishing disease causation
- a4. Describe clinical symptoms and complications of each disease.
- a5. Define the recent advances diagnostic and laboratory techniques necessary to establish diagnosis of common illnesses related to Chest specialty
- a6. Describe recent advances in the various therapeutic methods/alternatives used for common chest diseases
- a7. Describe some infection control methods.

##### b) Intellectual Skills:

By the end of the course the student is expected to:

- b1. Interpret data acquired through history taking to reach a provisional diagnosis for chest diseases and differentiate between the different types of disease causing microbes.
- b2. Select from different diagnostic alternatives the ones that help reaching a final diagnosis for chest problems.
- b3. Conduct research studies that add to knowledge.

**c) Professional and Practical Skills:**

By the end of the course the student should have the ability to

- c1. Identify the methods of staining, culturing and biochemical reactions
- c2. Recognize micro-organisms on morphological bases.
- c3. Perform bronchoscopic and imaging evaluation related to chest speciality.
- c4. Recognize some serological tests used in diagnosis

**b- General and Transferable Skills:**

By the end of the course the student should have the ability to:

- d1. Interpret a report containing microbiological or immunological data.
- d2. Use the computer and internet to gather scientific information
- d3. Use of different sources for information and knowledge.
- d4. Manage scientific meetings according to the available time.

**3- Contents**

Topics	No. of hours	Lecture	Practical
<u>Systematic Bacteriology</u>			
Gram +ve cocci	6	6	
Gram -ve cocci			
Gram +ve bacilli	4	4	
Gram -ve bacilli	4	4	
<u>General virology</u>	4	4	
<u>Systematic Virology</u>			
RNA viruses	4	4	
DNA viruses	4	4	
<u>Mycology</u>			
Opportunistic mycosis Antifungal drugs	4	4	
<b>Total</b>	<b>30hr</b>	<b>30hr</b>	
<b>Total credit hours</b>	<b>2</b>	<b>2</b>	

**4- Teaching and Learning Methods**

- 4.1- Lectures.
- 4.2-practical lessons

**5- Student Assessment Methods**

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20%	- Knowledge - Knowledge - Knowledge, intellectual skills

-Commentary, Problem solving: 15%	- Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills

### Assessment Schedule

Assessment 1... Written exam	Week 24
Assessment 2... Structured Oral Exam	Week 24

### Weighting of Assessments

Final-term written examination	50%
Structured Oral Exam	50%
Total	100%

Formative only assessments: attendance and absenteeism

## 6- List of References

### 6.1- Essential Books (Text Books)

Jawetz Medical Microbiology 2016.

Roitt Essential Immunology.

Abbas Clinical Immunology

Alberts Molecular Biology

### 6.2- Recommended Books

A coloured Atlas of Microbiology.

Topley and Wilson, Microbiology

### 6.3- Periodicals,

Web Sites, Microbiology and Immunology

<http://mic.sgmjournals.org/>

## 7- Facilities Required for Teaching and Learning:

- 1- ADEQUATE INTRASTRUCTURE: including teaching places (teaching class), comfortable desks, good source of aeration, bathrooms, good illumination and safety and security
- 2- Teaching tools: including screens, computers data shows, projectors, flip charts, white board, video player, digital video camera, scanner, copier, color and laser printers.

**Course Coordinator:** Dr. Nahed Fath Alla

**Head of Department:** Prof. Abeer Shinaif

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013, **Revised:**1/12/2018

## Course Specifications of Immunology and Molecular Biology in MD Degree in Chest Diseases and Tuberculosis Chest

Sohag University

Faculty of Medicine

1. Program on which the course is given: MD Degree of Chest Diseases and Tuberculosis
2. Major or minor element of program: minor
3. Department offering the program: Chest Diseases and Tuberculosis
4. Department offering the course: Medical Microbiology and Immunology department
5. Academic year/ Level: first part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018.

### A. Basic Information

**Title:** Course Specifications of immunology and molecular biology in MD Degree in Chest Diseases and Tuberculosis Chest

**Code MIC 0503-300**

Title	Lecture	Practical:	Total:	Credit
immunology and molecular biology	30	-----	<b>30hrs</b>	<b>2</b>

### B. Professional Information

#### 1. Overall Aims of Course

By the end of the course the postgraduate student should be efficiently able to have advanced knowledge of the microorganisms affecting human beings all over the world and particularly in Egypt, and learn to use the knowledge gained from applied microbiology to better understand the pathology, clinical symptoms, complications and the laboratory tests needed for diagnosis of each disease, in particular how to use microbiological testing in determining antibiotic prescription. The student is also expected to acquire advanced knowledge about the structure and function of the immune system and the role of the immune system in health and disease.

#### 2. Intended Learning Outcomes of Course (ILOs):

##### a) **Knowledge and Understanding:**

By the end of the course the student is expected to:

- a1. Describe the structure and function of immune system
- a2. Describe the metabolism and genetics of organisms.
- a3. Illustrate the recent advances in the scientific methods of establishing disease causation
- a4. Define the recent advances diagnostic and laboratory techniques necessary to establish diagnosis of common illnesses related to Chest specialty

##### b) **Intellectual Skills:**

By the end of the course the student is expected to:

- b1. Select from different diagnostic alternatives the ones that help reaching a final diagnosis for chest problems.
- b2. Conduct research studies that add to knowledge.

b3. Determine the involvement of the immune system in the current disease process.

**c) Professional and Practical Skills:**

By the end of the course the student should have the ability to

- c1. Identify the methods of staining, culturing and biochemical reactions
- c2. Recognize some serological tests used in diagnosis

**d) General and Transferable Skills:**

By the end of the course the student should have the ability to:

- d1. Interpret a report containing microbiological or immunological data.
- d2. Use the computer and internet to gather scientific information
- d3. Use of different sources for information and knowledge.
- d4. Manage scientific meetings according to the available time.

**3. Contents**

Topics	No. of hours	Lecture	Practical
<b><u>Immunology</u></b>			
Congenital & Acquired Immunity	4	4	
Immunological Cells	4	4	
Hypersensitivity	4	4	
Transplantation	4	4	
Tumor Immunology	4	4	
Immunodeficiency	4	4	
Antigen –antibody reactions	---	---	
Agglutination tests	---	---	
Precipitation tests	---	---	
Complement fixation test	---	---	
1. Immunofluorescence	---	---	
2. ELIZA-RIE	---	---	
<b><u>Molecular biology</u></b>			
PCR	--	--	
<b>Total</b>	<b>30</b>	<b>30</b>	
<b>Total credit hours</b>	<b>2</b>	<b>2</b>	

**4. Teaching and Learning Methods**

4.1- Lectures.

4.2- practical

**5. Student Assessment Methods**

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills

## Assessment Schedule

Assessment 1...Written exam	week 24
Assessment 2... Structured Oral Exam	week 24

## Weighting of Assessments

Final-term written examination	50%
Structured Oral Exam	50%
Total	100%

Formative only assessments: attendance and absenteeism

## 6. List of References

### 6.2- Essential Books (Text Books)

Jawetz Medical Microbiology 2016.

Roitt Essential Immunology.

Abbas Clinical Immunology

Alberts Molecular Biology

### 6.2- Recommended Books

A colored Atlas of Microbiology.

Topley and Wilson, Microbiology

### 6.3- Periodicals, Web Sites, etc

Microbiology

Immunology

<http://mic.sgmjournals.org/>

## 7. Facilities Required for Teaching and Learning:

1. ADEQUATE INTRASTRUCTURE: including teaching places (teaching class), comfortable desks, good source of aeration, bathrooms, good illumination and safety and security
2. Teaching tools: including screens, computers data shows, projectors, flip charts, white board, video player, digital video camera, scanner, copier, color and laser printers.

**Course Coordinator:** Dr. Nahed Fath Alla

**Head of Department:** Prof. Abeer Shinaif

**Date:** 18/12/2011, **Revised:** 1/9/2012, **Revised:** 1/12/2013, **Revised:** 1/12/2018

# Course Specification of Chest Diseases in MD Degree in Chest Diseases and Tuberculosis

Sohag University

Faculty of Medicine

1. Program on which the course is given: MD Degree of Chest Diseases and Tuberculosis
2. Major or minor element of program: major
3. Department offering the program: Chest Diseases and Tuberculosis
4. Department offering the course: Chest Diseases and Tuberculosis
5. Academic year/ Level: second part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018.

## A. Basic Information

**Title:** Course Specification of Chest Diseases in MD Degree in Chest Diseases and Tuberculosis

**Code CHE 0503-300**

Title	Lecture	Clinical	Total	Credit
Chest Diseases	390 hrs	780	1170	52

## B. Professional Information

### 1. Overall Aims of Course

By the end of the course the student should be able to:

- a. Deal with common chest diseases on the basis of adequate history taking, physical examination, interpretation of relevant supportive investigations and management.
- b. Perceive and integrate progress in medical technology.

### 2. Intended Learning Outcomes of Course (ILOs):

According to the intended goals of the faculty

#### a) **Knowledge and Understanding:**

By the end of the course the student should be able to:

- a1. Mention the recent advances in the causation of disease and disease pathogenesis
- a2. Illustrate the recent advances in the scientific methods of establishing disease causation
- a3. Enumerate recent advances in clinical picture and differential diagnosis of common illnesses related to Chest specialty
- a4. Define the recent advances diagnostic and laboratory techniques necessary to establish diagnosis of common illnesses related to Chest specialty
- a5. Describe recent advances in the various therapeutic methods/alternatives used for common chest diseases
- a6. List the principles and fundamentals of quality assurance of professional practice in the field of chest diseases.

#### b) **Intellectual Skills:**

By the end of the course the student should have the ability to:



- b1. Interpret data acquired through history taking to reach a provisional diagnosis for chest diseases
- b2. Select from different diagnostic alternatives the ones that help reaching a final diagnosis for chest problems.
- b3. Assess risk in professional practices in the field of Chest Diseases and Tuberculosis.
- b4. Plan to improve performance in the field of Chest Diseases and Tuberculosis
- b5. Identify problems and find solutions based on the available data in chest diseases.
- b6. Have the ability to innovate nontraditional solutions to chest diseases problems
- b7. Manage Scientific discussion based on scientific evidences and proofs.

**c) Professional and Practical Skills:**

By the end of the course the student should have the ability to:

- c1. Perform physical examination of patients for all organs and structures related to Chest specialty.
- c2. Collect the results of diagnostic procedures.
- c3. Perform the diagnosis of common illnesses.
- c4. Preserve the patients with life threatening conditions and initiate the proper management according to patient's needs.
- c5. Design a treatment prescription and medical reports..
- c6. Properly interpret pulmonary function tests and blood gas of different respiratory diseases pattern.
- c7. Perform bronchoscopic and imaging evaluation as read X-ray chest and CT scan related to chest specialty.
- c8. Train junior staff through continuous medical education programs.
- c9. Design new methods, tools and ways of professional practice.

**d) General and Transferable Skills:**

By the end of the course the student should have the ability to:

- d1. present reports in seminars effectively
- d2. Use standard computer programs effectively.
- d3. Teach others and evaluate their performance.
- d4. Assess himself/herself and identify his personal learning needs.
- d5. Use of different sources for information and knowledge.
- d6. Work coherently and successfully as a part of a team and team's leadership.
- d7. Manage scientific meetings according to the available time.

**3. Contents:**

Topic	No. of hours	Lecture	clinical
The development and structure of the respiratory tract.	7	7	
Functions of the respiratory tract.	70	8	62
Scientific basis of lung function in health and diseases.	7	7	
The clinical manifestations of respiratory diseases.	70	10	60
Diagnostic procedures.	168	20	148

Drugs used in respiratory diseases.	6	6	
Pulmonary cutaneous disorders.	5	5	
Pulmonary-systemic interactions.	10	10	
Infectious diseases of the lungs:-	110	70	40
Pulmonary infectious syndromes.	10	10	
Special hosts and opportunistic infections.	15	15	
Specific microorganisms.	20	20	
Mycobacterial infections.	25	25	
Chronic obstructive pulmonary disease.	102	7	95
Respiratory failure.	97	7	90
Disorders of the pulmonary circulation:-	74	34	40
The pulmonary circulation.	15	15	
Pulmonary thromboembolic disease.	4	4	
Pulmonary hypertension and cor pulmonale.	5	5	
Pulmonary edema and Acute respiratory distress syndrome.	5	5	
Pulmonary vasculitis.	3	3	
Pulmonary arteriovenous malformation.	2	2	
Surgical aspects of pulmonary medicine.	4	4	
Interstitial and Inflammatory lung diseases.	65	15	50
Immunologic and Interstitial diseases:-	19	19	
Systemic sarcoidosis.	4	4	
Hypersensitivity pneumonitis.	4	4	
The eosinophilic pneumonias.	3	3	
Pulmonary manifestatoin of the collagen vascular diseases.	4	4	
Cryptogenic fibrosing alveolitis.	3	3	
Radiation pneumonitis.	1	1	
Depositional and Infiltrative Disorders:	8.5	8.5	
Depositional diseases of the lungs.	3	3	
Pulmonary histiocytosis X.	1.5	1.5	
Pulmonary lymphangioliomyomatosis.	1.5	1.5	
The lungs in patients with inborn errors of metabolism.	2.5	2.5	
Bronchial asthma.	95	15	80
Alveolar diseases.	23.5	23.5	
Sleep and sleep disorders.	40	15	25
Cystic fibrosis	6.5	6.5	
Occupational and environmental lung disorders.	30.5	10.5	20
Drug induced lung diseases.	10	10	
Neoplasms or the lungs.	55	20	35
Development disorders of the lungs.	10	10	
Disorders of the Pleural space.	35	10	25

Diseases of the mediastinum.	10	8	2
Diseases of the chest wall.	10	6	4
Anomalies and diseases of the diaphragm and spine.	10	10	
Respiratory Intensive Care Unit	5	5	
Medicological aspect of lung disease.	7	3	4
<b>Total</b>	<b>1170</b>	<b>390</b>	<b>780</b>
<b>Total credit hours</b>	<b>52</b>	<b>26</b>	<b>26</b>

#### 4. Teaching and Learning Methods:

- 4.1- Illustrated lectures.
- 4.2- Clinical rounds on patients (twice/weekly for 8 weeks)
- 4.3- attendance in outpatients clinic (twice/ weekly for 8 weeks)
- 4.4- Case studies in department conference (once weekly for 8 weeks)
- 4.5- Interactive presentation (lectures with discussion)

#### 5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2- Log book	- General transferable skills
5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.5-OSCE	-Practical skills, intellectual skills General transferable skills

#### Assessments schedule:

Assessment 1.... log book (formative exam)	Week: 80
Assessment 2.... Final written exam ....	Week: 96
Assessment 3.....Final OSCE .....	Week: 96
Assessment 4 ... Final Structured Oral Exam	Week: 96

#### Weighting of Assessments

- Final Written Examination. Separate exam.
- Passing in the written exam is a condition to attend the following exams:
- Structured Oral Exam. 50%
  - OSCE 50 %

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Total	100%
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Formative only assessment: simple research assignment, log book, attendance and absenteeism.

## **6. List of References**

### **Essential Books (Text Books):**

Crofton and Doglas 2000, Fishman Text book for chest diseases 2015

### **Recommended Books:**

Pulmonary secrets, Text book for pulmonary medicine

Periodicals, Web Sites: [www.ersnet.org](http://www.ersnet.org), [www.ERS-education.org](http://www.ERS-education.org),  
[www.erj.ersjournals.com](http://www.erj.ersjournals.com), <http://err.ersjournals.com>.

## **7. Facilities Required for Teaching and Learning:**

1. ADEQUATE INTRASTRUCTURE: including teaching places (teaching class), comfortable desks, good source of aeration, bathrooms, good illumination and safety and security
2. Teaching tools: including screens, computers data shows, projectors, flip charts, white board, video player, digital video camera, scanner, copier, colour and laser printers.

**Course Coordinator:** Dr. Mona Taha Hussein.

**Head of Department:** Dr. Kamal Abd-Elsattar Atta.

**Date:** 18/12/2011, Revised: 1/9/2012, Revised:1/12/2013, Revised : 1/12/2018.