



## توصيف برنامج ماجستير الأمراض الصدرية

( عام ٢٠١٣-٢٠١٤ )

### \* معلومات أساسية : Basic information

- ١ - اسم البرنامج : ... ماجستير فى الامراض الصدرية
- ٢ - طبيعة البرنامج : multiple ( مشترك )
- ٣ - القسم / الأقسام المسئولة عن البرنامج: - قسم الأمراض الصدرية -
- ٤ - اسم القسم المانح للدرجة: - قسم الأمراض الصدرية -
- ٥ - الأقسام المشاركة فى البرنامج: قسم التشريح - قسم الهستولوجى - قسم الفيسيولوجى - قسم الكيمياء الحيوية الطبية - قسم الفارماكولوجى - قسم الميكروبيولوجى - قسم الصحة العامة - قسم الامراض الباطنية
- ٦ - تاريخ إقرار البرنامج فى مجلس القسم : ٢٠١٣ / ٩ / ٥
- ٧ - تاريخ إقرار البرنامج فى مجلس الكلية: ١٥ / ٩ / ٢٠١٣
- ٨ - مسؤول البرنامج: Prof. Magdy Omar

*Professor of Chest Diseases and Tuberculosis- Member of the Egyptian Society of Chest Diseases and Tuberculosis*

٩ - المراجعة الداخلية للبرنامج: Prof. Mahmoud El-Sahahy

*Professor of Chest Diseases and Tuberculosis- Member of the Egyptian Society of Chest Diseases and Tuberculosis*

١٠ - المراجعة الخارجية للبرنامج: Prof. Fawzy Abu Al-Naga Al-Omery.  
(Prof. Chest Diseases and Tuberculosis, Tanta faculty of medicine)

### Professional information

### \* معلومات متخصصة:

#### ١ - الأهداف العامة للبرنامج :

#### 1- Overall Aims of the Program:

The overall goals of the program are:

- 1.1 : To provide the knowledge and educational experience for the basic practice in the field of the Chest medicine.
- 1.2 : **To provide** students with an understanding of the Diagnosis, problem solving and decision makes skills necessary for proper evaluation and management of chest disease.
- 1.3 : **To familiarize** students with the *patients and how to ask for medical history* & how to detect physical signs.
- 1.4 : **To enable** the students to reach the diagnosis and choose the best diagnostic modalities &



treatment for various chest disorders.

1.5 : **To teach** appropriate ethical and professional skills necessary for establishment of good communication with patients and colleagues.

1.6 : **To learn** competencies necessary for continuous professional development.

1.7 : **To provide** the basics of bronchoscopy procedure techniques of interventional bronchoscopy and visualize the bronchial tree and Know different modalities of interventional pulmonology

٢ - المخرجات التعليمية المستهدفة من البرنامج :

## 2-Intended Learning Outcomes (ILOS):

### 2. a. Knowledge and Understanding :المعرفة والفهم:

*By the end of the sessions the student should be able to:*

2. a. 1: Describe the normal structure and function of the human respiratory systems and mind at the molecular, biochemical & cellular structures.

2. a. 2: Know how to take respiratory history & understand beside clinical signs and the methods of investigations of different pulmonary diseases.

2. a. 3: Describe the ways of pulmonary medical treatment; know the indications & contraindications of pulmonary intervention procedures and alternative surgical treatment strategies.

2. a. 4: Recognize the scientific basis and interpretation of various diagnostic modalities for establishing diagnosis of some diseases.

2. a. 5: *Understand* how to follow up the patient during treatment & deal with complications

### 2 ب - القدرات الذهنية:

#### 2.b: Intellectual Skills:-

*By the end of the sessions the student should be able to:*

2. b.1: relate the clinical and investigational database to be proficient in clinical problem solving in respiratory medicine.

2. b.2: **Solve problems** through analyses of all sources of information in addition to the patient interview to Interpret and evaluate the medical history.

2.b.3: Formulate the questioning approach to own work & that of others to solve clinical problems.

2.b.4: Interpret patient symptoms and physical findings in terms of their anatomic, pathologic and functional diagnostic significances.

2.b.5: Create diagnostic hypothesis with the available modes of investigations & Select the most appropriate and cost effective diagnostic procedures for each problem.

### ٢ ج :مهارات مهنية وعملية :

#### 2.c. Practical & Clinical Skills:-

*By the end of the sessions the student should be able to:*

2. c.1:**Perform** basic diagnostic skills in field of respiratory medicine.

2. c.2: **write** safe prescription for different chest diseases.

2. c.3: **Write** medical reports related to chest diseases.



2.c.4 *mange* different chest diseases.

## 2.d. General and transferable skills: : ٢.د . مهارات عامة

*By the end of the sessions the student should be able to:*

2. d.1: **Establish** life-long self-learning required for continuous professional development.
2. d.2: **Use** the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
2. d.3: **Retrieve**, with manipulation of information by all means, including electronic means.
2. d.4: **Present** information clearly in written, electronic and oral forms.
2. d.5: **Establish** effective interpersonal relationship to Communicate ideas and arguments.
2. d.6: **Work** effectively as a member or a leader of an interdisciplinary team and

## 3- Academic Standards

### ٣ - المعايير الأكاديمية للبرنامج:

- **Academic Standards of Master Program of chest diseases and tuberculosis**, approved in department council no (2) date 05 / 9 / 2013, and in faculty council no. (356) date ١٥ / ٩ / 2013. (ملحق ١)

## 4- Reference standards

### 4- العلامات المرجعية:

- a) المعايير القياسية لبرامج الدراسات العليا (درجة الدكتوراة) الصادرة عن الهيئة القومية لجودة التعليم والإعتماد (مارس ٢٠٠٩) **Academic standards , Master Program (March 2009)** which were issued by the National Authority for Quality Assurance & accreditation of education NAQAAE (ملحق ٢)

## (5): Program structure and contents

### 5 - هيكل ومكونات البرنامج :

أ - مدة البرنامج : (18 months)

### Program duration

- **1<sup>st</sup> part:** - One Semester (**6 months**)
- **2<sup>nd</sup> part:** - one Semester (**12 months**)
- **Thesis :** (one semester)

ب - هيكل البرنامج:

### Program structure

- **Total hours of program** 36 credit hours
- **Theoretical ...16**
- **Practical ...8**
- **University requirements: 6**
- **Thesis 6 credit hours**

ج - مستويات ومقررات البرنامج:

الزامي compulsory



الساعات المعتمدة	الكود	المقررات	البند
٦ ساعات	UNIV 601	للجامعة والكلية	متطلبات
٧ ساعات		يشمل الأتي :	الجزء الأول
١.٥ ساعة	CHES 601	مقرر علمي في الفسيولوجيا والكيمياء الحيوية	
١ ساعة	CHES 602	مقرر علمي في التشريح والنمو الجنيني والهستولوجيا	
١ ساعة	CHES 603	مقرر علمي في الفارماكولوجيا	
١.٥ ساعة	CHES 604	مقرر علمي وعملي في الباثولوجيا	
١ ساعة	CHES 605	مقرر علمي وعملي في البكتريولوجيا	
١ ساعة	CHES 606	مقرر علمي في الصحة العامة والوبائيات	
٥ ساعات		تسجل بها الأنشطة المختلفة مثل حضور الندوات العلمية	كراسة الأنشطة
١٦ ساعة			الجزء الثاني
٣ ساعات	CHES 607	مقرر علمي واكاديمي في الامراض الباطنية	
١٠ ساعات	CHES 608	مقرر علمي واكاديمي في الامراض الصدرية التدرن	
٣ ساعات		تدريب حقل على مكافحة الدرن والأمراض الصدرية	
٦ ساعات			رسالة الماجستير
٤٠ ساعة			الاجمالي

**First part (15 weeks duration/6 months)**

a- Compulsory courses:

		Number s of hours per week	Total
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		Lect	practical	Teaching hrs.
Physiology	CHES601	24	48	72
Medical Biochemistry				
Anatomy & embryology	CHES602	24	48	72
Histology				
Pharmacology	CHES٦٠3	24	48	72
Pathology	CHES٦٠4	24	48	72
Microbiology	CHES٦٠5	24	48	72
Community medicine	CHES٦٠6	24	48	72
Internal medicine	CHES٦٠7	48	48	96
Medical Statistics	UNI600	24	48	72
Total		194	396	600

b- Elective courses. none

### Second part (30 weeks duration/12 months)

a- Compulsory courses.

		Number s of hours per week		Total teachi
		L	practical	
Medical & surgical pulmonary medicine	CHES608	240	768	1008
Field study		48	96	144
Log Book				
Activities				
Total		288	864	1152

b- Elective courses. none

c- Selective. none

٦- محتويات المقررات (راجع توصيف المقررات)



- كود أو رقم المقرر :
- اسم المقرر :
- المحتويات: (طبقاً لما هو مذكور في اللائحة)

#### ٧ - متطلبات الإلتحاق بالبرنامج : Program admission requirements

#### متطلبات الإلتحاق بالبرنامج : ( طبقاً لما هو مذكور في اللائحة):

#### (7): Program admission requirements:

مادة (٤): يشترط في قيد الطالب لدرجة الماجستير :

(١)

- أ- أن يكون حاصلًا على درجة البكالوريوس في الطب والجراحة من إحدى جامعات ج.م.ع أو على درجة معادلة لها من معهد علمي معترف به من الجامعة بتقدير جيد على الأقل.
  - ب- يسمح للحاصل على الدبلوم وفقاً لنظام هذه اللائحة وبتقدير جيد على الأقل بتسجيل رسالة لاستكمال درجة الماجستير بشرط ألا يكون قد مر أكثر من ثلاث سنوات على تاريخ حصوله على درجة الدبلوم وبغض النظر على تقديره في درجة البكالوريوس.
  - ت- يسمح للحاصل على الدبلوم وعلى خلاف لنظام هذه اللائحة أن يسجل لدرجة الماجستير بشرط أن يكون تقديره في الدبلوم لا يقل عن جيد وبغض النظر عن تقديره في البكالوريوس.
- (٢) أن يكون قد أمضى السنة التدريبية أو ما يعادلها (سنة الامتياز)
- (٣) أن يتفرغ للدراسة لمدة سنة على الأقل في الجزء الثاني (فصلين دراسيين)
- مادة (٥): يكون التقدم للقبول لدرجة الماجستير مرة واحدة في السنة خلال شهري يوليو وأغسطس من كل عام.
- تبدأ الدراسة لدرجة الدبلوم في شهر أكتوبر من كل عام.

#### ٨ - القواعد المنظمة لإستكمال البرنامج :

- مادة (٦): تتولى لجنة الدراسات العليا بالكلية عن طريق لجنة تشكل لكل تخصص من أعضاء مجلس القسم التابع له المادة والقسم المانح للدرجة وضع البرنامج التفصيلي للمقررات في حدود الساعات المعتمدة الواردة باللائحة وعند الاختلاف يتم الاسترشاد بمقررات جامعة القاهرة ومقررات الشهادات العالمية الأوربية والأمريكية يعتمدها مجالس الأقسام ثم يقرها مجلس الكلية وتشمل هذه الساعات محاضرات نظرية ودراس عملية وتدريب إكلينيكي ومحاضرات وندوات مشتركة.
- مادة (٧): يشترط في الطالب لنيل درجة ماجستير التخصص في أحد الفروع الإكلينيكية والعلوم الطبية الأساسية:
- أ- حضور المقررات الدراسية والتدريبات الإكلينيكية والعملية والمعملية بصفة مرضية طبقاً للساعات المعتمدة.
  - ب- أن يقوم بالعمل كطبيب مقيم أصلي أو زائر لمدة سنة على الأقل في قسم التخصص بالنسبة للعلوم الإكلينيكية.
  - ت- أن ينجح في امتحان القسمين الأول والثاني.
  - ث- اجتياز الطلب لثلاث دورات في الحاسب الآلي (دورة في مقدمة الحاسب – دورة تدريبية متوسطة – دورة في تطبيقات الحاسب الآلي) وذلك قبل مناقشة الرسالة.
  - ج- اجتياز اختبار التوفيل بمستوى لا يقل عن ٤٠٠ وحدة وذلك قبل مناقشة الرسالة.
  - ح- أن يقوم باعداد بحث في موضوع تقره الجامعة بعد موافقة مجلس القسم ومجلس الكلية ينتهي باعداد رسالة تقبلها لجنة التحكيم.



## ٩ - Students Assessment Methods

## ٩ - طرق وقواعد تقييم المتحقين بالبرنامج

ما تقيسة من مخرجات التعلم المستهدفة	الطريقة	م
To assess knowledge and understanding & intellectual skills: From 2.a.1.....2.a.10. and b.1.....2.b.٨.	Written examination	1
To assess knowledge and understanding, intellectual skills & General & transferable skills 2.a.1.....2.a.10., 2.b.1.....2.b.٨., 2.d.1.....2.d.8.	Oral examination	2
To assess knowledge and understanding, intellectual skills & practical and clinical skills and General & transferable skills: 2.a.1.....2.a.10., 2.b.1.....2.b.٨., 2.d.1.....2.d.8.2.a.1.....2.a.10., 2.c.1.....2.c.8.	Practical & clinical examination	3
To assess knowledge and understanding, intellectual skills & practical and clinical skills and General & transferable skills: 2.a.1.....2.a.10., 2.b.1.....2.b.٨., 2.d.1.....2.d.8.2.a.1.....2.a.10., 2.c.1.....2.c.8.	Thesis Discussion	

## Final exam.

## First part

اجمالي	الدرجة				الاختبار	المقرر
	إكلينيكي	عملي	شفهي	تحريري		
200		50	٥٠	١٠٠	اختبار تحريري مدته ساعة ورقه منفصله + اختبار شفوي + اختبار عملي	التشريح
200		50	٥٠	١٠٠	اختبار تحريري مدته ساعة ورقه منفصله + اختبار شفوي + اختبار عملي	الفسولوجي
200		50	٥٠	١٠٠	اختبار تحريري مدته ساعة ورقه منفصله + اختبار شفوي + اختبار عملي	الباثولوجيا
150			50	١٠٠	اختبار تحريري مدته ساعة ورقه منفصله + اختبار شفوي	الفارماكولوجي
١٥٠			٥٠	١٠٠	اختبار تحريري مدته ساعة ورقه منفصله + اختبار شفوي	الصحة والوبائيات فيما يخص الجهاز التنفسي
200		50	50	100	اختبار تحريري مدته ثلاث ساعات +	الامراض الباطنية العامة



					اختبار اكلينيكي + اختبار شفوي	
100				100	اختبار تحريري مدته ساعة ونصف	إحصاء طبي- طرق البحث - القيم الطبية
1200	إجمالي الدرجة					

### Second part

إجمالي	الدرجة				الاختبار	المقرر
	شفهي	إكلينيكي	MCQ	تحريري		
٤٠٠	١٠٠	100	30	170	اختباران تحريريان مدة كل منهما ساعتين ونصف+ امتحان MCQ مدته نصف ساعة فى الامراض الصدرية والتدرن + اختبار اكلينيكي فى الامراض الصدرية والتدرن + اختبار شفوي فى الامراض الصدرية والتدرن و الوسائل التشخيصية .	الجراحة العامة
٤٠٠	إجمالي الدرجة					

### Evaluation of Program:

### ١٠ - طرق تقويم البرنامج:

Evaluator	Tools	Sample
Internal evaluator (s) مقيم داخلي	Focus group discussion Meetings	Report ٢-١
External Evaluator (s) مقيم خارجي	Reviewing according to external evaluator checklist report of NAQAA.	1-2 Report
Senior student (s) طلاب السنة النهائية	مقابلات , استبيان	جميع الطلبة
Alumni الخريجون	مقابلات , استبيان	عينة لا تقل عن ٥٠% من طلبة آخر ٣ دفعات
Stakeholder (s) أصحاب العمل	مقابلات , استبيان	عينة ممثلة لجميع جهات العمل
Others طرق أخرى	None	





**Program Coordinator:**

**Name Prof / Magdy Omar      Signature.....**

**Head of chest disease Department  
Prof. Sherif Essa                      signature .....**

**Date 02/09/201٣**



## ملحقات :

ملحق ١ : Academic standard of the program

ملحق ٢ : المعايير القياسية العامة للدراسات العليا الصادرة عن الهيئة.

ملحق 3: مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا الصادرة عن الهيئة.

ملحق 4: مصفوفة البرنامج مع المعايير الأكاديمية للبرنامج.

ملحق 5: مصفوفة المقررات مع البرنامج Program-Courses ILOs Matrix

ملحق (٦) : توصيف المقررات Program courses



## Academic standard of the program

### وثيقة المعايير الأكاديمية المرجعية لبرنامج الدبلوم

# Academic Reference Standards for Master Degree in Chest Diseases and Tuberculosis

## 1. Graduate specifications

On completion study Master of Chest Diseases programs the graduate must be able to :

1-1 mastering the basics of the application and methodologies of scientific research and the use of his tools in the diagnosis and treatment of respiratory diseases

1-2 application of the analytical method and use different tactics in the diagnosis of thoracic diseases

1-3 specialized in the diagnosis and treatment of respiratory diseases and integrate various medical science knowledge applications

1-4 show awareness of respiratory disease and the ongoing development of plans for treatment

1-5 determine respiratory diseases that are related to the environment or to the various professions and find appropriate treatment her

1-6 mastering specific skills thoracic diseases and the use of various technologies in the diagnosis and treatment

1.7 Ability to work within a team to meet the needs of patients perform my bed and high-quality, ethical and responsible individual taken into account within the family and society

1-8 the ability to take the appropriate decision to resolve the acute respiratory problems in normal circumstances and disaster

1-9 to use available resources of devices and medical supplies to bring the greatest benefit to serve patients and the need to maintain them

1-10 show awareness in promoting public health and community development and environmental conservation in light of regional and global variables

1-11 the ability to follow the rules and ethics of the medical profession

1-12 capacity for self-development academically and professionally and to maintain CME

1-13 show the ability to craft required in dealing with patients, colleagues and the rest of the other disciplines

1-14 continuous self-assessments



## **2. The General standards**

### **2.1 Knowledge and understanding**

On completion study Master of Chest Diseases programs the graduate must be able to :

2.1.1 Grasping the basics and theories and knowledge on thoracic diseases and basic medical sciences related diseases pectoris

2.1.2 The effect of the exercise of Chest Diseases to preserve the environment of infectious and occupational diseases, environmental pollution

2.1.3 Ribs on specialist periodicals in respiratory diseases and diseases related to scientific research

2.1.4 Respect for academic and scientific, ethical and legal principles in the field of health care

2.1.5 Principles and the basics of quality in the diagnosis and treatment of respiratory diseases

2.1.6 The ability to follow the basics and ethics of scientific research and its applications

2.1.7 Main principles in emergency medicine diagnosis and treatment of respiratory life-threatening diseases, including drug therapy with BS and non-intensive care with follow-up and rehabilitation in various stages of life

2.1.8 Population Health and demography health needs of the population and life statistics concepts

2.1.9 Main principles of infection and immunity and concepts infection control and patient safety

### **2-2 mental skills:**

On completion study Master of Chest Diseases programs the graduate must be able to :

2.2.1 Data analysis and evaluation of disease history and clinical examination and selection of appropriate medical tests in order to put the right diagnosis and the development of appropriate treatment plan

2.2.2 Diagnosis of various thoracic diseases in the absence is reported on the potential for it

2.2.3 Linking various medical sciences to find the accurate diagnosis of respiratory diseases

2.2.4 Conducting a research study or writing a systematic scientific study on the problem of Chest Diseases problems contribute to the diagnosis or treatment

2.2.5 Improving performance planning to develop in the field of Chest Diseases

2.2.6 Risk practice Chest Diseases of infection and contact with the patient and take action to protect the graduate of the occupational diseases evaluation procedures

2.2.7 Make decisions for dealing with patient respiratory diseases in the light of the symptoms and tests available

2.2.8 Ensure cost-effectiveness in all remedial measures



2.2.9 Refer patients to obtain the appropriate specialist advice

### 2-3 clinical and professional skills:

On completion study Master of Chest Diseases programs the graduate must be able to :

2.3.1 Master the basic and modern skills in the field of thoracic diseases

2.3.2 Writing and evaluating various reports

2.3.3 Methods and tools to assess the list in the field of thoracic diseases

2.3.4 Identify cases to be referred to a higher level of care with the judgment on the possibility of self-disposition or not

2.3.5 a medical survey of the important cases of health

### 2-4 public and transferrable skills :

On completion study Master of Chest Diseases programs the graduate must be able to :

2.4.1 Ability to communicate, coordinate and cooperate with the medical team and patients and their families and official bodies

2.4.2 The use of information technology in the diagnosis of respiratory diseases and to collect data on patients and archive files and save

2.4.3 The ability to self-assessment of medical practice

2.4.4 The use of different sources of information and knowledge about the disease Chest

2.4.5 Rules and indicators evaluating the performance of others

2.4.6 Work with a group within multi-team specialists

2.4.7 Learn management skills, including time management

٢.٤.٨ self-learning ability and ability to ensure continuous medical learning

موافقة مجلس الكلية في ٢٧/١/٢٠١٣

موافقة مجلس القسم في جلسة رقم ٢ في ٧/١٠/٢٠١٣

رئيس القسم

اد/ شريف عيسى

ملحق 2: المعايير القياسية العامة للدراسات العليا الصادرة عن الهيئة



## برامج الماجستير

### ١ - موصفات الخريج

- خريج برنامج الماجستير في أي تخصص يجب أن يكون قادرا على :
- ١-١ إجادة تطبيق أساسيات ومنهجيات البحث العلمي واستخدام أدواته المختلفة
  - ٢-١ تطبيق المنهج التحليلي واستخدامه في مجال التخصص
  - ٣-١ تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة في ممارسته المهنية
  - ٤-١ إظهار وعيا بالمشاكل الجارية والرؤى الحديثة في مجال التخصص
  - ٥-١ تحديد المشكلات المهنية وإيجاد حلول لها
  - ٦-١ إتقان نطاق مناسب من المهارات المهنية المتخصصة واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية
  - ٧-١ التوصل بفاعلية والقدرة على قيادة فرق العمل
  - ٨-١ اتخاذ القرار في سياقات مهنية مختلفة
  - ٩-١ توظيف الموارد المتاحة بما يحقق أعلى استفادة والحفاظ عليها
  - ١٠-١ إظهار الوعي بدوره في تنمية المجتمع والحفاظ على البيئة في ضوء المتغيرات العالمية والاقليمية
  - ١١-١ التصرف بما يعكس الالتزام بالنزهة والمصداقية والالتزام بقواعد المهنة
  - ١٢-١ تنمية ذاته أكاديميا ومهنيا وقادرا على التعلم المستمر

### 2- المعايير القياسية العامة

#### ١-٢ المعرفة والفهم :

- بأنتهاء دراسة برنامج الماجستير يجب ان يكون الخريج على فهم ودراية بكل من :
- ١-٢-١ النظريات والاساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة
  - ٢-١-٢ التأثير المتبادل بين الممارسة المهنية وانعكاسها على البيئة
  - ٣-١-٢ التطورات العلمية في مجال التخصص
  - ٤-١-٢ المبادئ الاخلاقية والقانونية للممارسة المهنية في مجال التخصص
  - ٥-١-٢ مبادئ واساسيات الجودة في الممارسة المهنية في مجال التخصص
  - ٦-١-٢ اساسيات واخلاقيات البحث العلمي

#### ٢-٢ المهارات الذهنية :

- بأنتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :
- ١-٢-٢ تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل
  - ٢-٢-٢ حل المشاكل المتخصصة مع عدم توافر بعض المعطيات
  - ٣-٢-٢ الربط بين المعارف المختلفة لحل المشاكل المهنية
  - ٤-٢-٢ اجراء دراسة بحثية او كتابة دراسة علمية منهجية حول مشكلة بحثية
  - ٥-٢-٢ تقييم المخاطر في الممارسات المهنية في مجال التخصص
  - ٦-٢-٢ التخطيط لتطوير الاداء في مجال التخصص
  - ٧-٢-٢ اتخاذ القرارات المهنية في سياقات مهنية متنوعة
  - ٣-٢ المهارات المهنية

#### بأنتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :

- ١-٣-٢ اتقان المهارات المهنية الاساسية والحديثة في مجال التخصص
- ٢-٣-٢ كتابة وتقييم التقارير المهنية
- ٣-٣-٢ تقييم الطرق والادوات القائمة في مجال التخصص

#### ٤-٢ المهارات العامة والمنتقلة :



- بانتهاة دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :
- ١-٤-٢ التواصل الفعال بأنواعه المختلفة
  - ٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية
  - ٣-٤-٢ التقييم الذاتي وتحديد احتياجاته التعليمية
  - ٤-٤-٢ استخدام المصادر المختلفة لحصول على المعلومات والمعارف
  - ٥-٤-٢ وضع قواعد ومؤشرات تقييم اداء الاخرين
  - ٦-٤-٢ العمل في فريق سياقات مهنية مختلفة
  - ٧-٤-٢ ادارة الوقت بكفاءة
  - ٨-٤-٢ التعلم الذاتي والمستمر



مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا الصادرة عن الهيئة.

المعايير الأكاديمية لبرنامج ماجستير الأمراض الصدرية	المعايير القياسية للدراسات العليا الصادرة عن الهيئة القومية لضمان الجودة	
		١ - مواصفات الخريج
On completion study Diploma of Chest Diseases programs must be able to graduate:	خريج برنامج الماجستير في أي تخصص يجب أن يكون قادرا على :	
1-1 mastering the basics of the application and methodologies of scientific research and the use of his tools in the diagnosis and treatment of respiratory diseases	١-١ إجادة تطبيق أساسيات ومنهجيات البحث العلمي واستخدام أدواته المختلفة	
1-2 application of the analytical method and use different tactics in the diagnosis of thoracic diseases	٢-١ تطبيق المنهج التحليلي واستخدامه في مجال التخصص	
1-3 specialized in the diagnosis and treatment of respiratory diseases and integrate various medical science knowledge applications	٣-١ تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة في ممارسته المهنية	
1-4 show awareness of respiratory disease and the ongoing development of plans for treatment	٤-١ إظهار وعيا بالمشاكل الجارية والرؤى الحديثة في مجال التخصص	
1-5 determine respiratory diseases that are related to the environment or to the various professions and find appropriate treatment her	٥-١ تحديد المشكلات المهنية وإيجاد حلول لها	
1-6 mastering specific skills thoracic diseases and the use of various technologies in the diagnosis and treatment	٦-١ إتقان نطاق مناسب من المهارات المهنية المتخصصة واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية	
1.7 Ability to work within a team to meet the needs of patients perform my bed and high-quality, ethical and responsible individual taken into account within the family and society	٧-١ التوصل بفاعلية والقدرة على قيادة فرق العمل	
1-8 the ability to take the appropriate decision to resolve the acute respiratory	٨-١ اتخاذ القرار في سياقات مهنية مختلفة	
	٩-١ توظيف الموارد المتاحة بما يحقق أعلى استفادة والحفاظ عليها	
	١٠-١ إظهار الوعي بدوره في تنمية المجتمع والحفاظ على البيئة في ضوء المتغيرات العالمية	





<p>والاقلية</p> <p>١١-١ التصرف بما يعكس الالتزام بالنزهة والمصادقية والالتزام بقواعد المهنة</p> <p>١٢-١ تنمية ذاته أكاديميا ومهنيا وقادرا على التعلم المستمر</p>	<p>problems in normal circumstances and disaster</p> <p>1-9 to use available resources of devices and medical supplies to bring the greatest benefit to serve patients and the need to maintain them</p> <p>1-10 show awareness in promoting public health and community development and environmental conservation in light of regional and global variables</p> <p>1-11 the ability to follow the rules and ethics of the medical profession</p> <p>1-12 capacity for self-development academically and professionally and to maintain CME</p> <p>1-13 show the ability to craft required in dealing with patients, colleagues and the rest of the other disciplines</p> <p>1-14 continuous self-assessments</p>	
<p>بأنتهاء دراسة برنامج الماجستير يجب ان يكون الخريج على فهم ودراية بكل من :</p> <p>١-١-٢ النظريات والاساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة</p> <p>٢-١-٢-٢ التأثير المتبادل بين الممارسة المهنية وانعكاسها على البيئة</p> <p>٣-١-٢ التطورات العلمية في مجال التخصص</p> <p>٤-١-٢ المبادئ الاخلاقية والقانونية للممارسة المهنية في مجال التخصص</p> <p>٥-١-٢ مبادئ واساسيات الجودة في الممارسة المهنية في مجال التخصص</p> <p>٦-١-٢ اساسيات واخلاقيات البحث العلمي</p>	<p>On completion study Diploma of Chest Diseases programs must be able to graduate grasping both:</p> <p>2.1.1 Grasping the basics and theories and knowledge on thoracic diseases and basic medical sciences related diseases pectoris</p> <p>2.1.2 The effect of the exercise of Chest Diseases to preserve the environment of infectious and occupational diseases, environmental pollution</p> <p>2.1.3 Ribs on specialist periodicals in respiratory diseases and diseases related to scientific research</p> <p>2.1.4 Respect for academic and scientific, ethical and legal principles in the field of health care</p>	<p>٢- المعايير القياسية العامة</p> <p>٢. ١ المعرفة و الفهم</p>



	<p>2.1.5 Principles and the basics of quality in the diagnosis and treatment of respiratory diseases</p> <p>2.1.6 The ability to follow the basics and ethics of scientific research and its applications</p> <p>2.1.7 Main principles in emergency medicine diagnosis and treatment of respiratory life-threatening diseases, including drug therapy with BS and non-intensive care with follow-up and rehabilitation in various stages of life</p> <p>2.1.8 Population Health and demography health needs of the population and life statistics concepts</p> <p>2.1.9 Main principles of infection and immunity and concepts infection control and patient safety</p>	
<p>بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :</p> <p>٢-٢-١ تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل</p> <p>٢-٢-٢ حل المشاكل المتخصصة مع عدم توافر بعض المعطيات</p> <p>٢-٢-٣ الربط بين المعارف المختلفة لحل المشاكل المهنية</p> <p>٢-٢-٤ اجراء دراسة بحثية او كتابة دراسة علمية منهجية حول مشكلة بحثية</p> <p>٢-٢-٥ تقييم المخاطر في الممارسات المهنية في مجال التخصص</p> <p>٢-٢-٦ التخطيط لتطوير الاداء في مجال التخصص</p> <p>٢-٢-٧ اتخاذ القرارات المهنية في سياقات مهنية متنوعة</p>	<p>On completion study Diploma of Chest Diseases programs must be able to graduate grasping both:</p> <p>2.2.1 Data analysis and evaluation of disease history and clinical examination and selection of appropriate medical tests in order to put the right diagnosis and the development of appropriate treatment plan</p> <p>2.2.2 Diagnosis of various thoracic diseases in the absence is reported on the potential for it</p> <p>2.2.3 Linking various medical sciences to find the accurate diagnosis of respiratory diseases</p> <p>2.2.4 Conducting a research study or writing a systematic scientific study on the problem of Chest Diseases problems contribute to the diagnosis or treatment</p> <p>2.2.5 Improving performance planning</p>	<p>٢ - المعايير القياسية العامة</p> <p>٢. ٢ المهارات الذهنية</p>



	<p>to develop in the field of Chest Diseases</p> <p>2.2.6 Risk practice Chest Diseases of infection and contact with the patient and take action to protect the graduate of the occupational diseases evaluation procedures</p> <p>2.2.7 Make decisions for dealing with patient respiratory diseases in the light of the symptoms and tests available</p> <p>2.2.8 Ensure cost-effectiveness in all remedial measures</p> <p>2.2.9 Refer patients to obtain the appropriate specialist advice</p>	
<p>بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على : ١-٣-٢ اتقان المهارات المهنية الاساسية والحديثة في مجال التخصص ٢-٣-٢ كتابة وتقييم التقارير المهنية ٣-٣-٢ تقييم الطرق والادوات القائمة في مجال التخصص</p>	<p>On completion study Diploma of Chest Diseases programs must be able to graduate grasping both:</p> <p>2.3.1 Master the basic and modern skills in the field of thoracic diseases</p> <p>2.3.2 Writing and evaluating various reports</p> <p>2.3.3 Methods and tools to assess the list in the field of thoracic diseases</p> <p>2.3.4 Identify cases to be referred to a higher level of care with the judgment on the possibility of self-disposition or not</p> <p>2.3.5 a medical survey of the important cases of health</p>	<p>٢- المعايير القياسية العامة ٣. ٢. المهارات المهنية</p>
<p>بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على : ١-٤-٢ التواصل الفعال بأنواعه المختلفة ٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية</p>	<p>On completion study Diploma of Chest Diseases programs must be able to graduate grasping both:</p> <p>2.4.1 Ability to communicate, coordinate and cooperate with the medical team and patients and their</p>	<p>٢- المعايير القياسية العامة ٤. ٢. المهارات العامة و المنتقلة</p>



<p>٢-٤-٣ التقييم الذاتي وتحديد احتياجاته التعليمية</p> <p>٢-٤-٤ استخدام المصادر المختلفة لحصول على المعلومات والمعارف</p> <p>٢-٤-٥ وضع قواعد ومؤشرات تقييم اداء الاخرين</p> <p>٢-٤-٦ العمل في فريق سياقات مهنية مختلفة</p> <p>٢-٤-٧ ادارة الوقت بكفاءة</p> <p>٢-٤-٨ التعلم الذاتي والمستمر</p>	<p>families and official bodies</p> <p>2.4.2 The use of information technology in the diagnosis of respiratory diseases and to collect data on patients and archive files and save</p> <p>2.4.3 The ability to self-assessment of medical practice</p> <p>2.4.4 The use of different sources of information and knowledge about the disease Chest</p> <p>2.4.5 Rules and indicators evaluating the performance of others</p> <p>2.4.6 Work with a group within multi-team specialists</p> <p>2.4.7 Learn management skills, including time management</p> <p>٢.٤.٨self-learning ability and ability to ensure continuous medical learning</p>	
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ملحق 4: مصفوفة مضاهاة المعايير الأكاديمية للبرنامج و أهداف و نواتج تعلم البرنامج

ملحق (4)

مصفوفة مضاهاة المعايير الأكاديمية العامة والأهداف العامة ونواتج تعلم البرنامج لطلبة الماجستير

المعايير الأكاديمية العامة	اهداف ونواتج تعلم البرنامج				اهداف البرنامج	المعايير الأكاديمية العامة
	المهارات العامة	المهارات المهنية	المهارات الأدبية	المعارف والفهم		
1	X				X	1-1-1
2			X		X	1-1-2
3				X		1-1-3
4	X	X		X		1-1-4
5	X		X		X	1-1-5











توصيف المقررات

Program courses

First part	Code
Physiology	CHES601
Medical Biochemistry	
Anatomy & embryology	CHES602
Histology	
Pharmacology	CHES٦٠٣
Pathology	CHES٦٠٤
Microbiology	CHES٦٠٥
Community medicine	CHES٦٠٦
Internal medicine	CHES٦٠٧
Medical Statistics	UNI600
Second part	
1-Chest Medicine	CHES٦٠٨



Benha University.

Faculty of Medicine.

**Department of physiology.**

### Course Specifications

**Course title: PHYSIOLOGY FOR Master chest disease ...**

**Code: CHES601**

**Academic Year (201<sup>٣</sup> – 201<sup>٤</sup>)**

**Department offering the course: PHYSIOLOGY Master chest disease (201<sup>٣</sup> – 201<sup>٤</sup>)**

- **Date of specification approval:** department council No. , date.

Faculty council No. ...., date .../.../201<sup>٣</sup>

Date of chest department approval 05/09/2013

Date of specification approval: faculty council

number : date : 16/10/2013

#### A- Basic Information

- **Allocated marks:** 150 marks.
- **Course duration:** 15 weeks of teaching.

**Teaching hours:** 1.5 credit hour .

- credit hours / week = 22.5 hrs total teaching hours.

#### B- Professional Information

##### 1 – Overall Aims of Course

1.1. Physiology course aims at approaching to the detailed knowledge of human physiology.

##### – Intended learning outcomes of course (ILOs)

##### 2.1- Knowledge and understanding:

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

2.1- List according to priority the main functions of systems, organs and cells.

2.2- Explain and describe the basic and detailed physiological processes in correct medical terms and in correct order.

2.3- Memorize important physiological definitions and laws.

2.4-understand the different mechanisms of homeostasis and how to use it in applied physiology.



## **2.2- Intellectual skills:**

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

- 2.2.1- Identify deviations from the normal physiology and its effects.
- 2.2.2- Translate the consequences of physiological disorders into clinical manifestations and vice versa (interpret clinical manifestations into physiological data).
- 2.2.3- Illustrate physiological information in the form of simplified diagrams with complete data on it.
- 2.2.4- Interconnect different branches of physiology to each other and to other branches of medicine.
- 2.2.5- Analyze any physiological curve.
- 2.2.6- Compare homologous physiological structures and processes.
- 2.2.7- The ability to search, analyze and summarize updated physiological information.

## **2.3- Professional and practical skills:**

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

- 2.3.1- Perform efficiently the appropriate steps and procedures in measuring pulse , respiratory rate and arterial blood pressure.
- 2.3.2- Perform simple experimental blood tests and the use of this data in problem solving.
- 2.3.3- Read a normal ECG paper.
- 2.3.4- interpret different laboratory tests as isolated perfused heart
- 2.3.5- asses pulmonary function tests

## **2.4.- General and transferable skills**

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

- 2.4.1- show discipline and appropriate manners when working in a lab and cooperation with his colleges and respect towards general property and how to handle learning facilities with care.
- 2.4.2- deal properly and cautiously in a lab.
- 2.4.3- Use the sources of biomedical information to remain current with the advances in knowledge & practice.
- 2.4.4-participate in community development and in drawing up and implementing development policies and plans.
- 2.4.5- Perform tests showing the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.
- 2.4.6- Demonstrate the macroscopic and microscopic criteria of the altered structures and functions of the body and its major organ systems that are seen in various diseases and conditions.
- 2.4.7- Perform routine technical procedures; diagnostic and therapeutic (including life support).

## **3- Physiology course for postgraduates (chest disease)**

Mechanics of respiration  
Pulmonary ventilation and factors affecting it  
Gas exchange through the respiratory membrane.



Pulmonary function tests  
Regulation of respiration  
Hypoxia — cyanosis — dyspnea.  
Pneunlothorax.  
Abnormal pattern of breathing  
C.O.P  
Arterial blood pressure and its regulation  
E.C.G  
Pulmonary circulation  
Coronary circulation  
Hemorrhage and shock  
Microcirculatjon  
Edema  
Venous circulation  
Acid — base balance  
Water and electrol<sup>y</sup>te balance  
Anemias  
Sympathetic and parasympathetic supply to heart and lung.

Pyramidal and extrapyramidal tract

Fever

Suprarenal cortical hormone

Insulin

Thyroid hormone

#### 4- Teaching and learning methods:

##### 4.1.methods used

4.1-1.General lectures

4,1.2.-seminares

4,1.3-confrences

##### 4-2-teaching plan: Faculty bulaw

#### 5- Student assessment methods:

##### 5-a) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge and understanding & intellectual skills: <b>From 2.a.1.....2.a.4. and b.1.....2.b.5.</b>
Oral examination	To assess knowledge and understanding, intellectual



skills & General & transferable skills 2.a.1.....2.a.4., 2.b.1.....2.b.4., 2.d.1.....2.d.7..
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**5-b) TIME SCHEDULE:**

Exam	Week
5- Final exam	at end of second term (May-June)

**5-c-Assessment time schedule**

Assessment 1... Written and oral

**5-d-weighting system ( formative or summative).****D) Weighting System:**

Examination	Marks allocated	% of Total Marks
2- Final exam:		
a- Written	75	50%
b- Oral	75	50%
<b>Total</b>	<b>150</b>	<b>100%</b>

- Passing grades are: EXCELLENT >85%, VERY GOOD 75- <85%, GOOD 65- <75% and FAIR 60-<65%.

**FORMATIVE ASSESSMENT:**

- Student knows his marks after the Formative exams.

**5-E) Examination description:**

1. Examination	2. Type	3. Description
4. Final Examination	7. 1. Written 8.	9. written paper composed of short essay-type questions, long essay.
5. 6.	10. 3. Oral	11. One oral examination station with 2 staff members (10-15 minutes: 4-5 questions)

**6- List of references**

6.1- Course notes

Theoretical and practical books are available from faculty bookshops.

6.2- Essential books (text books)

Poul-Erik Paulev(2000): Medical Physiology And Pathophysiology Essentials and clinical problems.

6.3- Recommended books

Poul-Erik Paulev (2002): ): Medical Physiology Textbook

6.3- Periodicals, Web sites, ... etc



[www.jap.physiology.org](http://www.jap.physiology.org).

[www.physiologyonline.physiology.org/cgi/content](http://www.physiologyonline.physiology.org/cgi/content)

#### 7- Facilities required for teaching and learning

12. Data show.
13. Overhead projector.
14. postgraduate laboratories with their equipments.

**Course coordinator:** Prof. Alaa Elteleis

**Head of Department:** Prof. Alaa Elteleis

**Date:** 05/09/2013

**Benha University**

**Faculty of Medicine**

**Department of Histology & Cell Biology**

### Course Specifications

**Course title:** Histology & Cell Biology

**(Code):** CHES 602

**Academic Year (2013 – 2014)**

- **Department offering the course:** Histology & Cell Biology

**academic year of Master program of first part chest: (2014 – 2013)**

**Date of specification approval: (2013 – 2014)**

#### **A) Basic Information:**

- **Allocated marks:** 50marks
- **Course duration:** 14 weeks of teaching
- **Teaching hours:** 1\_hours/week



***B) Professional Information:***

***1- Overall Aim of the Course:***

- 1.1. Advanced scientific knowledge essential to practice Histology & Cell Biology dealing with chest.
- 1.2. Advanced scientific knowledge essential for establishing & maintaining good researchers.
- 1.3. Advanced scientific knowledge essential for following the rules of medical ethics.
- 1.4. Diagnostic, problem solving and decision making as well as communication skills necessary for proper evaluation and management of health problems & researches.
- 1.5. Appropriate ethical and professional education necessary for demonstrating appropriate attitudes with students and colleagues.
- 1.6. Lifelong learning competencies necessary for continuous professional development.
- 1.7. Research education as related to medical practice & more advanced scientific researches.
- 1.8. Advanced administrative skills necessary for delivery of research service.

***2- Intended Learning Outcomes (ILOs):***

***2.1. Knowledge and understanding:***

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

- 2.1.1. Describe the normal structure and function of the human body cells at the level of its organ & system on the molecular level.
- 2.1.2. Describe the normal structure and function of the human body cells and mind at the molecular, biochemical levels (including the principles of genetics).
- 2.1.3. Describe the normal growth and development of the human body cells & its impact on cellular function, molecular signaling.
- 2.1.4. Recognize the cell signaling & altered cell behavior.
- 2.1.5. Recognize the altered development, growth, structure and function of the body and mind that will be associated with common clinical conditions.

***2.2. Intellectual skills:***

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

- 2.2.1. Combine the technical and investigational database to be proficient in histological problem solving.
- 2.2.2. Generate a list of initial technical hypotheses for each problem.
- 2.2.3. Analyzes all sources of information to Interpret and evaluate the tissue samples

***2.3. Professional and practical skills:***

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



2.3..1. Adopt an empathic and holistic approach to the researches and their problems

2.3 .2 Demonstrate Respect for right researches' and involve them and /or their in management decisions.

2.3 .3 Demonstrate the more recent in researches in stem cells.

2.3 ..4. Respect the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague)..

2.3 ..5. Complies with the requirements of the national code of ethics issued by the Egyptian Medical Syndicate.

(لائحة آداب المهنة الصادرة من نقابة الأطباء)

2.3 ..6. Conduct counseling sessions for more advances in researches.

2.3 ..7. Reflect critically on their own performance and that of others, to recognize personal limitations regarding skills and knowledge to refer their student's facility at the appropriate stage.

#### 2.4. **General and transferable skills:**

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

2.4..1. Establish life-long self-learning required for continuous professional development.

2.4..2. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.4..3. Retrieve, manage, and manipulate information by all means, including electronic means.

2.4..4. Present information clearly in written, electronic and oral forms.

2.4..5. Establish effective interpersonal relationship to Communicate ideas and arguments .

2.4..6. Work effectively as a member or a leader of an interdisciplinary team .

2.4..7. Apply the principles of statistical methods for collection,

### **3- Course contents:**

#### **Cytology**

1-LM&EM picture ,function and molecular biology of cytoplasmic organelles:

-membranous( cell membrane, rough endoplasmic reticulum, smooth endoplasmic reticulum, Golgi apparatus, mitochondria, lysosomes, peroxisomes, proteosomes and annulate lamellae)

-non membranous organelles(ribosomes, microtubules ,centrioles, cilia , flagella and microfilaments)

#### **2-inclusions**

3-nucleus: structure by LM&EM ,function

4-DNA

5-types of RNA

6-physiological cell death





### **V-Epithelial tissue:**

- 1-Properties of epithelium .
- 2-Types of epithelium:(covering -glandular -neuro epithelium & myoepithelium)
- 3-Examples and sites of each type.
- 4-Functional importance.
- 5-Modification of epithelial cell surfaces.

### **VI- Connective tissue**

- 1-general character of connective tissue proper.
- 2-constituents of CT (ground substance, fibers, cells).
- 3-structure , types and staining properties of CT fibers.
- 4-types of connective tissue proper and site of each:
  1. loose (areolar) connective tissue .
  2. white fibrous or tendinous connective tissue .
  3. yellow elastic connective tissue
  4. adipose connective tissue
  5. reticular connective tissue
6. mucoid (myxomatous) connective tissue

### **VII- Cartilage :**

- 1-histological features of cartilage cells, fibers & matrix.
- 2-Types of cartilage and their specific histological features.
  - a-hyaline cartilage.
  - b. yellow elastic cartilage.
  - c. white fibro-cartilage.

### **VIII-Bone**

- 1-General microscopic features of bone and how it can be studied histologically
- 2-Types (compact & spongy bone ): structure, sites, and function.
- 3-Bone cells :structure (LM&EM) and functions .
- 4-Intercellular substance of bone .
- 5-The development and ossification



### **IX-Blood**

- 1-red blood corpuscles (histological structure &function).
- 2- histological structure &function of granular leucocytes( neutrophil ,eosinophil , basophils).
- 3- histological structure &function of non granular leucocytes (lymphocytes& monocytes).
- 4-differential leucocytic count
- 5-blood platelets (histological structure &function).
- 6-haemopoiesis.
- 7-myeloid tissue( inactive yellow bone marrow& active red bone marrow).

### **X-Muscle tissue**

- 1-General character and types .
- 2-skeletal muscle:
  - general features &types of skeletal muscle fibers .
  - organization of skeletal muscle.
  - functional ultrastructure of myofibrils& sarcomere.
  - molecular structure of actin and myosin
  - muscle contraction
  - innervation of skeletal muscle
  - cardiac muscle
- general structure and functional relations.
- Intercalated discs
- Conducting system of the heart
- moderator band
- 3-smooth muscle :  
general structure, muscle contraction& innervation.
- 4- comparative study of three types of muscles.
- 5- growth and regenerative ability of muscular tissue .

### **XI-Nervous tissue**

- 1-Structure of neuron (LM&EM) cell body, axon, ,dendrites
- 2- types of nerve cells
- 3-types and structure of nerve fibers
- 4-organization of nerve fibers
- myelination of CNS&PNS
- 6-nerve ganglia (types &structure).
- 7-synapses( structure and types)
- 8-degeneration and regeneration of neurons
- 9-stain used to study nervous tissue including those of degeneration
- 10-Neuroglia structure and their functions
- 11-Types and structure of nerve endings (receptors and effector )

### **I-CARDIOVASCULAR SYSTEM**



1-general structure of the wall of blood vessels

2-Arteries: Large , Medium-Sized& small (histological structure &function )

3-Veins ;Large , Medium-Sized& small(histological structure &function )

4-histological structure of specialized arteries &veins.

5-arteriovenous connections :

a-Capillaries histological structure and function

b- Sinusoids

c-arteriovenous anastomosis

6-Heart; histological structure of epicardium ,myocardium ,endocardium and valves

### **VIII- THE ENDOCRINE SYSTEM**

1-Pituitary Gland

2-Thyroid Gland

3-Parathyroid Glands

4-Adrenal (Suprarenal) Glands

5- pineal body

6-islet's of pancreas

7-difuse neuroendocrine system

### **THE IMMUNE SYSTEM AND LYMPHOID ORGANS**

1-structure of lymph vessels

2-distribution and structure of lymphoid tissue .

3-lymphatic organs:

a- Lymph Nodes (histological structure &function)

b-Spleen( histological structure &function& microcirculation)

c-Tonsils(histological structure &function)

d-Thymus(histological structure &function)

e-Mucosal immune system (histological structure &function)

4-Mononuclear phagocytes

5-Cells involved in the immune system

**Antigen presenting cell**



## THE RESPIRATORY SYSTEM

respiratory system (histological structure and function ) nasal cavity, nasal conchae, olfactory area, paranasal sinuses, nasopharynx, pharyngeal tonsils, larynx, epiglottis, trachea, bronchial tree, bronchioles)

2- respiratory portion respiratory (histological structure and function) bronchioles, alveolar ducts, alveolar sacs, alveoli ,interalveolar wall )

3-structure of pleura

4-structure of foetal lung

5-Non respiratory function of lung

6-Bronchus associated lymphoid tissue

### 4- Teaching and learning methods:

#### METHODS USED:

4.1.Lectures

4.2.Small group discussions: Museum specimens, demonstration (slides photographs and video films), models and case study.

4.3.Tutorials.

4.4.Seminars.

#### TEACHING PLAN:

Lectures: 1 h /week, Time from 10.00 am to 12.00 pm .

Time plan:

Item	Time schedule
Lectures	1 h /week;
<b>Total</b>	1/week

### 5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: Faculty by laws

#### 5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.

#### 5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- written examination	25	50%
2- oral examination	25	50%
<b>Total</b>	<b>50</b>	<b>100%</b>



### **FORMATIVE ASSESSMENT:**

Student knows his marks after the Formative exams.

### **5-E) Examinassions description:**

<b>Examination</b>	<b>Description</b>
1- written examination	Objectively structured questions
2- Oral examination	e.g. How many sessions

### **6- List of references:**

#### **6.1. Basic materials:**

- e.g. Department book:

6.1.1. Histology & Cell Biology department book

#### **6.2. Essential books (text books):**

6.2.1. Junqueira Basic Histology.

6.2.2. Gartner & Hiatt Atlas Histology

6.2.3. Wheater's functional Histology

#### **6.3. Recommended books:**

6.3.1. Junqueira Basic Histology.

6.3.2. Gartner & Hiatt Atlas Histology

6.3.3. Wheater's functional Histology

6.3.4. Mechiel ross text of histology

#### **6.4. Periodicals, Web sites, etc:**

6.4.1. <http://www.medscape.com>.

6.4.2. <http://www.pubmed.com>.

6.4.3. <http://Master.emedicine.com/maint/cme.asp>.

6.4.4. <http://www.science direct.com>.

### **7- Facilities required for teaching and learning:**

Facilities used for teaching this course include:

- Lecture halls: 2
- Museum hall: 6th floor
- Department lab

***Course coordinator: Prof Dr. Mohamed Magdi Zaky***

***Head of Department: Prof Dr Mohamed Magdi Zaky***

***Date of approval 05/09/2013***



**Benha University**  
**Faculty of Medicine**  
**Department of Clinical Pharmacology**

## Course Specification

**Course title:** Chest diseases Pharmacology

**(Code):** CHES 603

**Academic Year (2013 – 2014)**

- Department offering the course: **Clinical Pharmacology Department**
- Academic year of MSc. program: **2013\_2014.**
- Major or minor elements of the program: **Major.**
- Academic level: **First part.**
- Date of specification approval:
  - Department council No. **(168)** , date **3 /9 / 2013**
  - Chest department council : 05/09/2013 .**
  - Faculty council , date **19 / 10 / 2013** .

### **A) Basic Information:**

- **Allocated marks:** 60marks
- **Course duration:** 24 weeks of teaching
- **Teaching hours:** lectures:.....1 hours/week = 24 total teaching hours

### **B) Professional Information:**

#### **1- Overall Aim of the Course:**



- To provide the advanced knowledge about commonly used groups of drugs affecting different body systems and their implications in therapy of diseases and health promotion.

## **2- Intended Learning Outcomes (ILOs):**

### **2.1 Knowledge and understanding:**

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

#### **2.1- Knowledge and understanding:**

- 2.1.1- Discuss the pharmacokinetic, pharmacodynamic and pharmacotherapeutic properties of different groups of drugs affecting body systems.
- 2.1.2- Discuss the adverse and toxic effects, and their management of commonly used groups interactions.
- 2.1.4- Define clinically relevant age, sex and genetic related variations that affect response to drugs.
- 2.1.5- Discuss the pathophysiology of diseases and explain the rational basis for the use of drugs.
- 2.1.6- Discuss the impact of preventive pharmacology in promoting health and prevent illness.

#### **2.5. Intellectual Skills:**

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

- 2.5.1- interpret accurately drug's dosage, bioavailability, plasma half life and volume of distribution in different patient populations
- 2.5.2- reviews a comprehensive drug history of the patient.
- 2.5.3- Interpret drug adverse reactions.

#### **2.2. Practical and Clinical Skills**

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

- 2.2.1- Perform with precision different technique of drug administration.
- 2.2.2- Design rational therapeutic strategies for both acute and chronic conditions that take into account the various variables that influence these strategies. Choose the proper drug(s) for the proper clinical situation in proper dosage.

#### **2.6. General and transferable Skills:**

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

- 2.6.1- Demonstrate respect to all patients irrespective of their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient's culture.
- 2.6.2- Provide appropriate basic drug education to the patient and his family.
- 2.6.3- Communicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.



2.6.4- Understand the importance of life-long self-learning and show a strong commandment to it.

**3- Course contents:**

	Course	Code	Credit hours
<b>First part</b>	<b>Clinical Pharmacology</b>	CHES 603	
	<b>Respiratory system</b>		- 5 hours
	<b>Autacoids</b>		- 2 hours
	<b>Chemotherapy</b>		- 3 hours
	<b>CVS</b>		- 3 hours
	<b>Hormones</b>		- 3 hours
	<b>CNS</b>		- 3 hours
	<b>Autonomic</b>		- 2 hours
	<b>General</b>		- 3 hours
<b>Total</b>			<b>24 hours</b>

**4- Teaching and learning methods:**

**METHODS USED:**

4.1 – Lectures

4.2- Practical modules

**TEACHING PLAN:**

Item	Time schedule
Lectures	-1time/ week -35 min. each
Practical	-----
Total	

**5- Students Assessment methods:**

**5.A) Attendance Criteria:**

1. Practical attendance.





2. Log book.

**5.B) Assessment Tools:**

Tool	Purpose (ILOS)
Written examination	To assess knowledge acquisition, including MCQs and problem solving.
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.

**5.C) TIME SCHEDULE:**

Exam	Week
1- First part exam	After 6 months from registration for MSc. degree

**5-D) Weighting system:**

Written exams.	50 %
Oral Examination	40 %
Semester Work	10 %
Other types of Assessment	
<hr/>	
Total	100%

**FORMATIVE ASSESSMENT:**

Student knows his marks after the Formative exams.

**5-E) Examinassions description:**

**First part:**

Assessment(1): Written exams. (1hr)

Assessment (2): Oral examination.

**6- List of references:**

6.1 Course Notes



Handouts updated administered by staff members

6.2 Essential Books (Text Books):

David E. Golan; Armen H. Tashjian; Ehrin J. and Armstrong et al.(2005): Principles of pharmacology: the pathophysiologic basis of drug [et al.], Philadelphia : Lippincott Williams & Wilkins.

6.3- Recommended Books:

GOODMAN AND OILMAN(2005): THE PHARMACOLOGICAL BASIS OF THERAPEUTICS 11<sup>th</sup> edition.

6.4- web Sites:

[www.micromedex.co](http://www.micromedex.co)

**7- Facilities required for teaching and learning:**

- Lecture rooms:
- Section rooms
- Audio-visual teaching equipments (Computer, Projector, Video .....etc)
- Models and mannequins
- Video tapes, scientific pictures archives.

**Course Coordinator: Prof. Dr. Mohaned Mohammed**

**Head of Department: Prof. Dr. Mohaned Mohammed Ibrahim Shehab**



Benha University

Faculty of Medicine

Department of pathology

## Course Specification

Course title: Pathology for : Master degree of Chest

(Code): (CHES6 04)

Academic Year (2013 – 2014)

- Department offering the course: .....pathology.....
- Academic year of Master program: ...2013-2014.....
- Academic level: ...Master.....
- Date of specification approval:
  - Department council no....., date...14-8-2013.....
  - Chest department date 05/09/2013
  - Faculty council no ..... , date...16-10-2013.....

### A) Basic Information:

- Allocated marks: \_\_\_\_\_ 100 \_\_\_\_\_ marks
- Course duration: \_\_\_\_\_ 25 \_\_\_\_\_ weeks of teaching
- Teaching hours: \_\_\_\_\_ 1.2 \_\_\_\_\_ hours/week = \_\_\_\_\_ 30 \_\_\_\_\_ total teaching hours

### B) Professional Information:

#### 1- Overall Aim of the Course:

The overall goals of the course are to:

- 1.1. Good application of basic pathological knowledge essential for the practice of chest medicine
- 1.2. Providing basic and specialized services in relation with biopsy diagnosis in the practice of medicine and investigations.
- 1.3. Application of special knowledge & its integration with others that have relation with the special practice
- 1.4. Awareness of the running problems as early tumor detection and diagnosis of respiratory system
- 1.5. Diagnosis of practical problems as cases study and clinical assessments
- 1.6. Diagnosis, problem solving and decision making skills necessary for proper evaluation and management.
- 1.7. development of recent tools & ways essential for medical practice.



1.8. Awareness of his role in the progress of society and govern the environment in the light of international & local changes.

1.9. honesty and respect the practical rules.

1.10. Lifelong learning competencies necessary for continuous professional development.

## **2- Intended Learning Outcomes (ILOs):**

### **2.a. Knowledge and understanding:**

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

2.a.1. describe the dissection of respiratory biopsies.

2.a.2 define the clinical manifestations and differential diagnosis of common respiratory pathological cases.

2.a.3. list the scientific basis and interpretation of various diagnostic modalities essential for respiratory system medical practice .

2.a.4. Identify the principles that govern ethical decision making in clinical practice as well as the pathological aspect of medical malpractice.

2.a.5. Identify ethics of medical research.

2.a.6. Identify basic knowledge & theories needed to support literature retrieval and further research capabilities.

2.a.7. identify the importance of life-long self-learning required for continuous professional development.

### **2.b. Intellectual Skills:**

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

2.b.1. solve problem and make decision skills necessary for proper evaluation and management.

2.b.2. Evaluate the risky problems that could be met during taking biopsies .

2.b.3. analyze the clinical and investigational database

2.b.4. interpret the clinical and investigational database to be proficient in clinical problem solving.

2.b.5. Plan for performance development in his practice.

2.b.6. Select the most appropriate and cost effective diagnostic procedures for each problem.

2.b.7. Formulate of research hypothesis & questions.

### **2.c. Practical and Clinical Skills:**

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



- 2.c.1. examine, diagnose and evaluate of cases and investigation.
- 2.c.2. recognize and interpret all important pathological aspects for early cancer detection and assessment.
- 2.c.3. Perform the gross examination and able to describe the findings of different organs efficiently
- 2.c.4. diagnose and manage different respiratory cases.
- 2.c.5. understand reports like cancer assessment report, cytological report and immunohistochemical report.

## 2.d. General and transferable Skills:

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

- 2.d.1. Work effectively as a member or a leader of an interdisciplinary team and
- 2.d.2. Able to put rules & regularities for evaluation of performance of others.
- 2.d.3. Establish life-long self-learning required for continuous professional development
- 2.d.4. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
- 2.d.5. Do self criticism. .
- 2.d.6. Retrieve, manage, and manipulate information by all means, including electronic means.

## 3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group	Practical (hrs)	Total (hrs)	% of Total
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<b>1- General Pathology</b>	<b>5</b>	<b>Xx</b>	<b>0</b>	<b>5</b>	<b>16.5</b>
-Cell response to injury, Stem cells and repair, Tissue deposits	1	X	0	1	3.3
- Inflammation ,Granulomas ,Viral diseases	1	X	0	1	3.3
- Disturbance of growth	1	X	0	1	3.3
Neoplasia, Developmental and genetic diseases	1	X	0	1	3.3
- Circulatory disturbances, Radiation	1	x	0	1	3.3
Basic imunopathology - Diagnostic methods in pathology	1				



<b>2-systemic pathology</b>	<b>10</b>	<b>Xx</b>	<b>15</b>	<b>25</b>	<b>84.5</b>
- <b>Pulmonary infections</b>	<b>1.5</b>				
- <b>Chronic Obstructive Pulmonary Diseases (COPD):</b>	<b>1.5</b>	<b>Xx</b>	<b>2</b>	<b>3.5</b>	<b>11.6</b>
- <b>Circulatory disturbances</b>	<b>1</b>	<b>Xx</b>	<b>2</b>	<b>3.5</b>	<b>11.6</b>
- <b>Diffuse interstitial pulmonary disease</b>	<b>1</b>				
- <b>Tumors of lung &amp; pleura: Latest WHO classification</b>	<b>2</b>	<b>Xx</b>	<b>1.5</b>	<b>2.5</b>	<b>8.3</b>
- <b>Lymphoproliferative disorders of the lung</b>	<b>1</b>	<b>Xx</b>	<b>1.5</b>	<b>2.5</b>	<b>8.3</b>
- <b>Types of biopsies, Immunohistochemistry of the respiratory system &amp; other diagnostic methods.</b>	<b>2</b>		<b>3</b>	<b>5</b>	<b>10</b>
<b>Cytopathology in chest disease</b>		<b>Xx</b>	<b>2</b>	<b>3</b>	<b>16.6</b>
		<b>xx</b>	<b>3</b>	<b>5</b>	
<b>Total</b>	<b>15</b>	<b>x</b>	<b>15</b>	<b>30</b>	<b>100</b>

**4- Teaching and learning methods:****METHODS USED:**

1. Modified Lectures
  2. Small group discussions
  3. Problem solving.
  4. Self learning
5. Practical classes
  6. **museum of pathology**
  7. **histopathology slide lab**

**TEACHING PLAN:**

*Lectures: Division of students into 1 group  
1 /week, Time from 10 to 10:45.*

*Tutorials:*

*Practical classes*

**Time plan:**

Item	Time schedule
Lectures	<u>1</u> /week;
Practical	<u>1</u> hours / <u>   </u> week
Tutorial	<u>   </u> hours / <u>   </u> week
<b>Total</b>	<b>2/week</b>

**5- Students Assessment methods:**

**5-A) ATTENDANCE CRITERIA:** Faculty bylaws

**5-B) Assessment Tools:**

Tool	Purpose (ILOs)
Written examination	To assess knowledge, understanding & intellectual skills
Oral examination	To assess knowledge understanding & attitudes
Practical examination	To assess professional and practical skills

**5-C) TIME SCHEDULE:** Faculty bylaws

Exam	Week
1- First part: - written - oral	After 25 weeks





2- Second part: - written - oral	-
3- Thesis	-
4- Assignments & other activities	

**5-D) Weighting System:**

Examination	Marks allocated	% of Total Marks
1- First part:	100	100
a- Written	50	50
b- Practical	25	25
c- Oral	25	25
2- Second part:		
a- Written		
b- Practical		
c- Oral		
3- Thesis		
4- Assignments & other activities		
<b>Total</b>		

- The minimum passing & Passing grades (Faculty bylaws).

**FORMATIVE ASSESSMENT:**

Student knows his marks after the Formative exams.

**5-E) Examinations description:**

Examination	Description
<b>1- First part:</b> a- Written b- Practical c- Oral	MCQs, shorts assay, long essay, case reports, problem solving..... Identify jars, gallery of slides 2 sessions
<b>2- Second part:</b> a- Written b- Practical c- Oral	-
<b>3- Thesis:</b>	
6- Assignments & other activities	Assignments, practical books
<b>Total</b>	

**6- List of references:**



#### 6.1- Course notes

- 1- Departmental books of General and Special histopathology, available in secretary office.
- 2- Handouts updated, administered by staff members
- 3- Museum notebook.
- 4- CDs for histopathological slides and museum specimens are available at the department.

#### 6.2- Essential books (text books)

- Rosai and Ackerman's Surgical Pathology Juan Rosai, Mosby 2004
- Sternberg's Diagnostic surgical Pathology 4<sup>th</sup> edition, Lippincott Williams and Wilkins
- Kumar V ,Abbas AK ,Fausto N:Robbins and Cotran Pathologic Basis of Disease ,7<sup>th</sup> ed.;2005, Elsevier Saunders. Available at faculty bookshops & main library.

#### 6.3- Periodicals, Web sites, ... etc

<http://www.pathmax.com/> <http://www-medlib.med.utah.edu/WebPath/LABS/LABMENU.html#2>  
<http://www.med.uiuc.edu/PathAtlasf/titlePage.html>  
<http://www.medscape.com/pathologyhome>

<http://www.gw> hyperlink <http://umc.edu/dept/path/2> [umc.edu/dept/path/2F](http://umc.edu/dept/path/2F)

### **Facilities required for teaching and learning:**

Facilities used for teaching this course include:

15. Data show
16. Overhead projector
17. Museum specimens
18. Projector slides covering available slides in slide box
5. surgical specimen

**Course coordinator:prof.dr.Hala Adel Agina**

**Head of Department:Prof.Dr.Abdel latiff El-Balshi**

**Date: 14 / 8 /2014**

جامعة بنها

كلية الطب البشرى



توصيف مقرر (chest 605)

**Medical Microbiology & Immunology Course for Master Degree in Chest**

Academic Year 2013-2014

مواصفات المقرر:

البرنامج أو البرامج التي يقدم من خلالها المقرر :

Master Degree in Chest

المقرر يمثل **عنصراً رئيسياً** بالنسبة للبرنامج: الرئيسي

القسم العلمي المسنول عن البرنامج : قسم الامراض الصدرية

Medical Microbiology and Immuology department

القسم العلمي المسنول عن تدريس المقرر :

السنة الدراسية / المستوى : الاول

تاريخ اعتماد توصيف البرنامج : 5/4/2013

( أ ) البيانات الأساسية

العنوان :

Microbiology & Immunology Course for Master Degree in Chest

الكود : Chest 605

الساعات المعتمدة : 1 hour

المجموع: ٢٢.٥ hours

ساعات الإرشاد الأكاديمي : -

( ب ) البيانات المهنية

١ - الأهداف العامة للمقرر :

- 1.1. To educate students about the basic features of general bacteriology, virology, microbial genetics and mycology and to provide students with an understanding of the immune system, its protective functions and its role in the pathophysiology of infectious and non-infectious diseases.
- 1.2. To familiarize students with the common infections and diseases of medical importance, their microbial causes, as well as laboratory diagnosis, treatment, prevention and control of such diseases.
- 1.3. To enable the students to practice the principles infection control.

٢ - النتائج التعليمية المستهدفة للمقرر :

أ - المعرفة والفهم :

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

- 2.1.1. Illustrate general bacterial morphology, physiology and genetics.



- 2.1.2. Understand the host parasite relationship and microbial pathogenesis.
- 2.1.3. Explain the physiology of the immune system, its beneficial role, its interaction with tumors, its deficiency conditions, as well as its detrimental role in hypersensitivity, autoimmunity and transplant rejection
- 2.1.4. Describe the morphology, culture, antigenic structure and virulence factors of microorganisms of medical importance
- 2.1.5. Recognize the most important skin and venereal infectious conditions and outline the diagnosis, treatment, prevention and control of the most likely organisms causing such diseases
- 2.1.6. Describe the most important methods of decontamination, sterilization and principles of infection control.
- 2.1.7. Describe the basics of antimicrobial chemotherapy and resistance.
- 2.1.8. Understand the impact of molecular technology in microbiology and immunology.

ب - المهارات الذهنية :

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

- 2.2.1. Identify medically important bacteria based on microscopic examination of stained preparations.
- 2.2.2. Identify a Gram stain and a Ziehl-Neelsen stain.
- 2.2.3. Identify culture media and biochemical tests commonly used for bacterial identification and distinguish positive and negative results.
- 2.2.4. Define various sterilization processes and simple infection control measures

ج - المهارات المهنية والعملية الخاصة بالمقرر :

*By the end of the course, the graduates should be able to*

- 2.3.1. Identify medically important bacteria based on microscopic examination of stained preparations.
- 2.3.2. Identify a Gram stain and a Ziehl-Neelsen stain.
- 2.3.3. Identify culture media and biochemical tests commonly used for bacterial identification and distinguish positive and negative results.
- 2.3.4. Define various sterilization processes and simple infection control measures

د - المهارات العامة :

*By the end of the course, the student should be able to*

- 2.4.1. Demonstrate Respect for patients' rights and involve them and /or their caretakers in management decisions.
- 2.4.2. Adopt an empathic and holistic approach to the patients and their problems.
- 2.4.3. Respect the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague).
- 2.4.4. Conduct counseling sessions for prevention & control of different conditions for healthy individuals, for patients as well as their families.



## ٣ - محتوى المقرر :

Subject	Lectures (hrs)	Practical (hrs)	Total (hrs)	% of total
Introduction to Microbiology Bacterial Cell Structure Disinfection and Sterilization	0.75	0.5	1.25	5.6
Host parasite relationship Bacterial genetics (application of recombination and gene therapy) Antimicrobial chemotherapy	0.75		0.75	3.3
Staphylococci , streptococci, and Neisseria Pneumococci	0.5	2	2.5	11.1
Corynebacteria Bacillus Group & Clostridium	0.5	2	2.5	11.1
Mycobacteria , Gram negative bacilli & Gram negative small rods (all except moraxella, and in Haemophilus only Haemophilus influenza)	1	3	4	18
Spirochaetes , Mycoplasma , Rickettsia Chlamydia , Coxilla, Legionellae pneumophila &Listeria	1		1	4.4
Anaerobic gram negative bacilli Anaerobic gram negative cocci Applied Microbiology: respiratory tract infection, diseases transmitted by droplets	0.75		0.75	3.3
Cells of immune response. Natural &acquired immunity.	0.5		0.5	2.2



Immune response.				
Antigens,antibodies ,complement cytokines. Cell mediated immunity MHC Apoptosis&necrosis Superantigen	1		1	4.4
Hypersensitivity Autoimmune diseases Immunodeficiency diseases Tumor immunology Transplantation immunology	1		1	4.4
General virology – Structure – Lab. Diagnosis (idea) – Viral replication (idea) – Antiviral chemotherapy – Antiviral immunity – Pathogenesis of viral diseases – viral vaccines	1	1.25	2.25	10
Herpesviruses Adenoviruses	0.5		0.5	2.2
Orthomyxoviruses & Paramyxoviruses human immunodeficiency virus (HIV) hepatitis Viruses	1		1	4.4
Mycotoxins Antifungal drugs	0.5	1	1.5	6.7
Deep mycotic infections(espically histoplasmosis	0.5		0.5	2.2



& aspergillosis)				
Revisions		1.5 hour	1.5	6.7
Total	11.25 hs	11.25 hs	22.5hs	

**4- أساليب التعليم والتعلم:**

1. Lectures.
2. Practical classes
3. Small group discussion with case study and problem solving.
4. Assay (using library & internet)

**5 - أساليب تقييم الطلاب**

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition, including problem solving
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.
Practical examination	To assess practical skills.

**5-A) ATTENDANCE CRITERIA:**

1. Log book

**5-B) Assessment TOOLS:**

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition, including problem solving
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.
Practical examination	To assess practical skills.

**5-C) TIME SCHEDULE:**

Exam	Week
5- Final exam	at (May or September)

النسبة المئوية لكل تقييم :

**5-D) Weighting System:**



Examination	Marks allocated	% of Total Marks
- Final exam:		
a- Written	25	50%
b- Practical	10	20%
c- Oral	15	30%
<b>Total</b>	<b>50</b>	<b>100%</b>

- Passing grades are: EXCELLENT >85%, VERY GOOD 75- <85%, GOOD 65- <75% and FAIR 60-<65%.

#### FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

#### 5-E) Examination description:

Examination	Type	Description
Final Examination	1. Written	A three-hour written paper composed of short essay-type questions and Case study
	2. Practical	Spots 10 spots including slides, culture media, biochemical reactions, serological tests and instruments. On each specimen, a small question should be answered (quiz).
	3. Oral	One oral examination station with 2 staff members (10-15 minutes: 4-5 questions)

#### 6 - قائمة المراجع

٦ - ١ - مذكرات المقرر

1. Jawetz, Melnick and Adelberg's *Medical Microbiology*
2. *Mackie & McCartney Practical Medical Microbiology*.
3. Abul K. Abbas Cellular and molecular immunology.

٦ - ٢ - الكتب الدراسية

1. Microbiology an introduction
2. Lpincott's Microbiology illustrated review.
3. Medical Microbiology: Department book and practical manual.
4. Lectures on Medical Virology: Department book.
5. Basic Immunology: Department book.

٦ - ٣ - مجلات دورية ، مواقع إنترنت





1. [asmnews@asmusa.org](mailto:asmnews@asmusa.org)
2. <http://www.phage.org/black09.htm>
3. [http://www.microbe.org/microbes/virus\\_or\\_bacterium.asp](http://www.microbe.org/microbes/virus_or_bacterium.asp)
4. <http://www.bact.wisc.edu/Bact330/330Lecturetopics>
5. [http://whyfiles.org/012mad\\_cow/7.html](http://whyfiles.org/012mad_cow/7.html)
6. <http://www.microbelibrary.org>
7. <http://www.hepnet.com/hepb.htm>
8. [http://www.tulane.edu/~dmsander/Big\\_Virology/BVHomePage.html](http://www.tulane.edu/~dmsander/Big_Virology/BVHomePage.html)
9. <http://www.mic.ki.se/Diseases/c2.html>
10. <http://www.med.sc.edu:85/book/welcome.htm>
11. [http://www.bioiogy.arizona.edu/immunology/microbiology\\_immunology.html](http://www.bioiogy.arizona.edu/immunology/microbiology_immunology.html)

#### ٧ - الإمكانات المطلوبة للتعليم والتعلم

Facilities used for teaching this course include:

- Department lectures halls: 1
- Department Equipped Laboratories :2

- تم مناقشة التوصيف وإعتماده بمجلس القسم المنعقد بتاريخ / 2013

رئيس القسم :

التوقيع : Prof. Wafaa Al Shafei

أستاذ المادة :

التوقيع : Prof. Waffa Al Shafei

التوقيع :

## Benha Faculty of Medicine Community Medicine Master Program Specification 2013 - ٢٠١٤



## Basic information

- 1- **Program title:** Master of Community Medicine.
- 2- 2- Course code : 607  
Academic year : 2013 – 2014
- 3- **Departments:** Community Medicine Department.
- 4- **Coordinator:** Prof. Dr. Mahmoud Fawzy El-Gendy .
- 5- **Internal Evaluator:** Pro.Dr. Soad Darwish El Gendy.
- 5- **External evaluator (s):** Prof.Dr. Samir Mohamad Wassif.
- 6- **Last date of program specifications approval:** Department Council number 208, dated 29-8-2010  
**Revised & approved By Prof.Dr. Mahmoud Fawzy El Gendy 1/6/2013**
- 7- **Number of students enrolled to the program :**(Variable)
- 8- **Language used:** English.
- 9- **Learning & teaching:** Active teaching & learning
- 10- **Communication with the faculty through:**  
Web site: www.bfom.edu.eg.  
E-mail: Bfom@yahoo.com.  
Postal: Benha, Benha faculty of medicine, Fared Nada street  
Telephone: 013/3229450  
Fax: 013/3227518

## Professional Information

### 1- Program Aims:

The aim of the program is to provide postgraduate student with educational experience necessary for further practice in the community medicine through:

- 1.1 Effective application of principles of scientific research and utilization of Its different tools.
- 1.2 Application of analytic curriculum and using it in special field.
- 1.3 Application of special knowledge and mix it with knowledge related to practice.
- 1.4 Being aware of updating problems and new visions in special field.
- 1.5 Determination of practical problems and suggestion of solutions.
- 1.6 Performance of practical skills well and utilization of suitable technological methods in clinical practice.
- 1.7 Communication and leading teamwork through systematic practical work.
- 1.8 Making practical decision through available knowledge.
- 1.9 Utilization of available resources effectively.
- 1.10 Being aware of his role in community development and protect the environment through global and local changes.
- 1.11 Behaving in such a way that reflect fairness, consistency, career rule and accepting ask.
- 1.12 Being aware by the necessity of self development both academically and clinically and keep continuous learning.

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

#### A- Knowledge and Understanding:

**By the end of the program the postgraduate should be able to:**

- A.1 Describe theories, basics and specialized knowledge in learning field and sciences related to his career practice.
- A.2 Recognize mutual effect between clinical practice and environment.
- A.3 Develop scientifically in special field.



- A.4 Identify ethical and legal principles related to his career practice.
- A.5 Recognize principles and basics of quality.
- A.6 Be aware by basis and ethics of scientific research.

#### **B- Intellectual Skills:**

##### **By the end of the program the postgraduate should be able to:**

- B.1 Interpret and evaluate practical information and use it as standard for problem solving.
- B.2 Find solution for special problems in spite of absence of some information.
- B.3 Link different knowledge to solve practical problem.
- B.4 Make research study or write scientific study about research.
- B.5 Evaluate problem & risk factors related to clinical practice.
- B.6 Plan for performance improvement in special field.
- B.7 Make practical decision using different ways.

#### **C- Skills:**

##### **C.a Professional & Practical Skills:-**

##### **By the end of the program the postgraduate should be able to**

- C.a.1 Apply effectively basic and updated practical skills in special field.
- C.a.2 Write and evaluate practical reports.
- C.a.3 Evaluate ways and methods in special field.

##### **C.b General and Transferable Skills:**

##### **By the end of the program the postgraduate should be able to:**

- C.b.1 Communicate effectively through its different types.
- C.b.2 Utilize technological knowledge to serve in clinical practice development.
- C.b.3 Evaluate and determine self need of education.
- C.b.4 Use different sources to get knowledge and information.
- C.b.5 Work in team.
- C.b.6 Save time effectively.
- C.b.7 Lead a team in popular practical way.
- C.b.8 Achieve Continuous self learning.

#### **D-Attitude:**

##### **By the end of the program the postgraduate should be able to:**

- D.1 Develop Critical thinking.
- D.2 Learn skills of planning & organization.
- D.3 Work with others as teamwork.
- D.4 Acquire positive attitude towards his community & its needs.

### **3-Academic Standards:**

Community Medicine Department in Benha faculty of Medicine adopted the General National Academic Reference Standards (NARS) provided by authority for Quality Assurance & Accreditation of Education (NAQAAE)

### **4-External Reference for Standards (Benchmarks):**

Quality Assurance Agency for Higher Education Benchmarks  
in England, Wales and Northern Ireland (QAA, 2001)

**5- Program structure and courses:****6.a- Program duration :** 4 semesters.**6.b- Program structure:** total 48 credit hours**I -First part:** - total 7 credit hours

- Environmental Health
- Basic nutrition
- Psychology
- Microbiology
- Parasitology

**II-Second Part:** total 17 credit hours

- Medical statistics
- Demography
- Administration
- Health services
- Nutritional disorders
- Health economics
- Recent topics
- Epidemiology

**III- Thesis:** 12 credit hours**IV- Logbook:** 5 credit hours**V- Other Faculty requirements:** 7 credit hours

First Part					
Course name	Course code	Lectures	Tutorials/Practical	Total	ILOs
Environmental Health	COMM 601	1.5	0.5	2	A1,A2,A3
Nutrition	COMM 602	1	-	1	A1,A2,A3
Microbiology	COMM 603	1	0.5	1.5	C.a.1,C.b.1,C.b.2,C.b.3,
Parasitology	COMM 604	1	0.5	1.5	C.a.1,C.b.1,C.b.2,C.b.3,
Psychology	COMM 605	1	-	1	D2,D4
<b>Total</b>				<b>7 credit hours</b>	

Second Part					
Course name	Course code	Lectures	Tutorials/Practical	Total	ILOs
Medical statistics	COMM 606	1	1	2	A1,A4,A6,B4,C.b.4,D1
Demography	COMM 607	1	-	1	A3,D4
Epidemiology	COMM 608	3	1	4	A1,A2,A3,B1,B2,B3,B5,B7,C.a.1,C.a.2,C.a.3
Health	COMM	4	1	5	A1,A3,B1,B5,B6,B7,C.a.1,C.a.2,C.a.3,C.b.1,C.b.2,



services	609				C.b.3,C.b.4,C.b.5,C.b.6,C.b.7,D4
Health economics	COMM 610	1	-	1	A1,B3,D1,D2,D3
Nutritional disorders	COMM 611	1	0.5	1.5	A1,B5
Administration	COMM 612	1	0.5	1.5	A1,A5,B6,C.b.3,C.b.4,C.b.5,C.b.7,C.b.8,D2,D3
Special Topics	COMM 613	-	1	1	C.b.8
<b>Total</b>	<b>17 Credit hours</b>				

**7-Course contents:**

Courses of the First part					
Course name	Code	Contents	Lectures	Tutorial/Practical	Total
Environmental Health	COMM 601	Physical hazards:- <ul style="list-style-type: none"> <li>▪ Heat disorders</li> <li>▪ Pressure disorders</li> <li>▪ Noise</li> <li>▪ Radiation</li> <li>▪ vibration</li> <li>▪ illumination</li> <li>▪ Air pollution</li> <li>▪ Food sanitation</li> <li>▪ Water sanitation</li> <li>▪ Waste disposal</li> <li>▪ Insect &amp; rodent control</li> </ul>	1.5	0.5	2
Nutrition	COMM 602	Basic elements of nutrition:- <ul style="list-style-type: none"> <li>▪ carbohydrates</li> <li>▪ Fats</li> <li>▪ Proteins</li> <li>▪ Minerals</li> <li>▪ Vitamins</li> <li>▪ Trace elements</li> <li>▪ Antioxidants</li> </ul> Food additives Nutritional assessment Therapeutic nutrition	1	-	1
Microbiology	COMM 603	General microbiology special microbiology immunology Virology	1	0.5	1.5
Parasitology	COMM 604	Trematodes Cestodes Nematodes Protozoa Entomology	1	0.5	1.5



		Far East Trematodes Parasitological techniques Immunology.			
Psychology	COMM 605	Motivation Leadership Communication	1	-	1
<b>Total</b>	<b>7 credit hours</b>				

Courses of the second part					
Course name	Code	Contents	Lectures	Tutorial/Practical	Total
Medical statistics	COMM 606	<ul style="list-style-type: none"> <li>▪ Types of data</li> <li>▪ Collection of data (sampling, screening, Survey &amp; epidemiological studies)</li> <li>▪ Presentation of data (tabular &amp; graphic)</li> <li>▪ Summarization of data</li> <li>▪ Analysis of data</li> <li>▪ Hypothesis testing</li> <li>▪ Interpretation of data.</li> <li>▪ Ethics of research</li> <li>▪ Biostatistics &amp; vital rates</li> </ul>	1	1	2
Demography	COMM 607	<ul style="list-style-type: none"> <li>▪ Census</li> <li>▪ Population pyramid</li> <li>▪ Demographic transition</li> <li>▪ Overpopulation problem</li> </ul>	1	-	1
Epidemiology	COMM 608	<ul style="list-style-type: none"> <li>▪ General epidemiology</li> <li>▪ Epidemiology of Communicable disease:               <ol style="list-style-type: none"> <li>1. Air borne infections</li> <li>2. Food borne infections</li> <li>3. Contact infection and STDs</li> <li>4. Arthropod born infections</li> </ol> </li> <li>▪ Epidemiology of non communicable diseases:               <ul style="list-style-type: none"> <li>▪ Cardiovascular diseases &amp; hypertension</li> <li>▪ D.M</li> <li>▪ Cancer</li> <li>▪ Injuries</li> </ul> </li> </ul>	3	1	4
Health services	COMM 609	<ul style="list-style-type: none"> <li>▪ Maternal &amp; child health services</li> <li>▪ School health services</li> <li>▪ Adolescent health services</li> <li>▪ Rural health services</li> <li>▪ Geriatric health services</li> <li>▪ Occupational health services</li> <li>▪ Mental health</li> </ul>	4	1	5



Health economics	COMM 610	▪ Disease burden	1	-	1
Nutritional disorders	COMM 611	▪ Malnutrition ▪ Obesity	1	0.5	1.5
Administration	COMM 612	▪ Planning ▪ Organization ▪ Staffing ▪ Direction ▪ Controlling ▪ Reporting ▪ Budgeting ▪ Evaluation ▪ Quality assurance ▪ Total quality management ▪ Hospital administration ▪ Communication ▪ Leadership	1	0.5	1.5
Special Topics	COMM 613	▪ Recent topics related to Community Medicine	-	1	1
<b>Total</b>					<b>17 credit hours</b>

## 8- Program admission requirements:

### 8.a General requirements :

- Candidates should have MBBCH Degree from any Egyptian Faculty of Medicine or Equivalent Degree from Medical Schools approved by the Ministry of Higher Education

### 8.b special requirements:

- Candidates graduated from Egyptian Universities should have at least good grade in their final examination and good grade in community medicine course too.
- Speak & write English well.
- Having computer skills.

## 9- Regulations for progression and program completion:

Duration of the program is 4 semesters (2 academic years), starting from registration till acceptance of the thesis; divided to:

### First part:

- 6 months after registration should pass before the candidate can ask for examination in the first part & In case of failure, the candidate is examined in the subject of failure only.
- Two sets of exams: first in April & the second in October.
- A score of at least 60% is needed to pass the first part exam.

### Second part:

- 18 months after registration should pass before the candidate can ask for examination in the second part.
- Two sets of exams: first in April & the second in October.
- A score of at least 60% in written exam is needed to be admitted to the oral exam.
- Four times of oral exam are allowed before the student has to be re-attend the written exam.
- Thesis could start after registration and should be completed, defended and accepted after passing the second part final exam, and after passing of at least 24 months after documentation of the subject of the



thesis or 6 months after passing the second part should pass before discussing the thesis.

- Accepting the thesis is enough to pass this part.

### 10- Evaluation of Program Intended Learning Outcomes:

No.	Tool	ILOs
1	Written examination	To assess knowledge & intellectual skills.
2	Oral examination	To assess knowledge, intellectual skills& general& transferable skills.
3	Thesis	To assess professional ,practical & intellectual skills

### 11- Tools for program evaluation:

Evaluator	Tool	Sample
1.Senior student	Questionnaire	Attached annex
2.Alumni	Questionnaire	Available
3.Stakeholder (Employers)	Questionnaire	Available
4.External Evaluator(s)	Prof.Dr.Samir Mohamed Wassif.	Available reports

**Program Coordinator:** Prof. Dr. Mahmoud Fawzy El Gendy

**Head of department:** Prof. Dr. Mahmoud Abdel Moneom Dawah

**Dean of faculty of medicine:** Prof. Dr. Mohamad Alshafey

**Date:** 29 / 8 /2013

## Appendix Program-Courses ILOs Matrix

Courses	A- Knowledge & Understanding					
	A.1	A.2	A.3	A.4	A.5	A.6
Environmental Health	X	X	X			
Nutrition	X	X	X			
Microbiology						
Parasitology						





Psychology						
Medical statistics	X			X		X
Demography			X			
Epidemiology	X	X	X			
Health services	X		X			
Health economics	X					
Nutritional disorders	X					
Administration	X				X	
Special Topics						

Courses	B-Intellectual skills						
	B.1	B.2	B.3	B.4	B.5	B.6	B.7
Environmental Health							
Nutrition							
Microbiology							
Parasitology							
Psychology							
Medical statistics				X			
Demography							
Epidemiology	X	X	X		X		X
Health services	X				X	X	X
Health economics			X				
Nutritional disorders					X		
Administration						X	
Special Topics							

Courses	C- Skills										
	C.a.1	C.a.2	C.a.3	C.b.1	C.b.2	C.b.3	C.b.4	C.b.5	C.b.6	C.b.7	C.b.8
Environmental Health											
Nutrition											



Microbiology	X			X	X	X					
Parasitology	X			X	X	X					
Psychology											
Medical statistics							X				
Demography											
Epidemiology	X	X	X								
Health services	X	X	X	X	X	X	X	X	X	X	
Health economics											
Nutritional disorders											
Administration						X	X	X		X	X
Special Topics											X

Courses	D- Attitude			
	D.1	D.2	D.3	D.4
Environmental Health				
Nutrition				
Microbiology				
Psychology		X		X
Medical statistics	X			
Demography				X
Epidemiology				
Health services				X
Health economics	X	X	X	
Nutritional disorders				
Administration		X	X	
Special Topics				



**Benha Faculty of Medicine**  
**Chest Diseases Department**

## ***Course specifications***

**Course title :** *Master in Chest diseases and Tuberculosis*

**Code :** CHES708

**Academic Year ( 2013 – 2014 )**

**Department:** Chest Diseases Department

**Date of specification approved:** 2013-2014

### **A) Basic Information:**

Allocated marks : 1000 marks

Course duration : 24 months of teaching

Teaching hours : 16.25 hours / month = 292.5 total teaching hours

Teaching hours: lectures: 90hrs practical:202.5hrs

### **B) Professional Information:**

#### **1- Course contents:**

subject	Lectures (hrs)	Tutorial/ Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of total
Development and structure	2	xxx	xxx	2	0.7%
Functions of the lung	2	xxx	xxx	2	0.7%
Acid–base status	2	xxx	2	4	1.4 %
Lung mechanics and control of breathing	2	xxx	2	4	1.4 %
Lung defences and immunology	2	xxx	xxx	2	0.7%
Genetics of lung disease	2	xxx	xxx	2	0.7%
Clinical aspects	xxx	xxx	17	17	5.8%
Intercostal intubation	2	xxx	8	10	3.45
Fiberoptic bronchoscope and thoracoscope	2	xxx	4	6	2.1%
Pft	2	4	4	10	3.4%
Oxygen therapy and nebulizers	2	2	6	10	3.4%
Diagnostic imaging	2	4	6	12	4.1%
SMOKING and air pollution	2	2	xxx	4	1.4 %



Acute upper respiratory tract infection	2	xxx	xxx	2	0.7%
Pneumonia	2	xxx	4	6	%٢
Lung abscess	2	xxx	xxx	2	0.7%
Tuberculosis	6	2	120	128	43.8%
Fungal and parasitic diseases	2	xxx	xxx	2	0.7%
Chronic bronchitis and emphysema	2	4	4	10	3.4%
Respiratory failure	2	xxx	2	4	1.4 %
Pulmonary embolism	2	xxx	xxx	2	0.7%
Bronchiectasis	2	xxx	2	4	1.4 %
Cystic fibrosis	2	xxx	xxx	2	0.7%
Interstitial lung diseases	2	xxx	xxx	2	0.7%
Asthma	2	4	xxx	6	2.1%
Lung cancer	6	4	2	12	4.1%
Diseases of the pleura	4	xxx	2	6	%٢
Chest wall and neuromuscular disorders	2	xxx	xxx	2	0.7%
Diseases of the diaphragm	2	xxx	xxx	2	0.7%
Sleep related disorders	2	xxx	1.5	3.5	1.2 %
Diseases of the mediastinum	2	xxx	xxx	2	0.7%
Pulmonary manifestations of systemic disease	2	xxx		2	0.7%
Occupational lung diseases,	2	xxx	2	4	1.4 %
Lung transplantation	2	xxx	xxx	2	0.7%
Terminal care in respiratory diseases	2	xxx	xxx	2	0.7%
Nanotechnology in chest diseases	2	xxx	xxx	2	0.7%
<b>Total</b>	<b>80</b>	<b>30</b>	<b>182.5</b>	<b>292.5</b>	<b>100 %</b>

### III-A) Topics details:

#### **DEVELOPMENT AND STRUCTURE**

- 1) Development of the lungs
- 2) Development of the airways and vessels
- 3) Cellular development of the lung
- 4) Postnatal development
- 5) Structure of the respiratory tract
- 6) Blood vessels of the lung
- 7) Bronchial circulation
- 8) Pulmonary circulation
- 9) Lymphatics of the lung
- 10) Innervation of the lung

#### **FUNCTIONS OF THE LUNG**



1) Ventilation

- a) Minute ventilation
- b) Anatomical dead space
- c) Physiological dead space and alveolar ventilation
- d) Alveolar air equation
- e) Partial pressures of oxygen and carbon dioxide in the respiratory system
- f) Lung volumes

2) Perfusion

- a) Control of pulmonary circulation
- b) Variation in pulmonary circulation
- c) Measurement of pulmonary blood flow
- d) Causes of hypoxaemia

3) Diffusion

- a) Factors affecting gaseous diffusion in the lung
- b) Components of *DLCO*
- c) Significance of changes in *DLCO*
- d) Methods of measuring *DL*
- e) Oxygen and carbon dioxide transport in blood
- f) Measurement of blood gas tensions

**Acid–base status**

Interpretation of ABGs

**Lung mechanics**

- 1) Surfactant
- 2) Airways resistance
- 3) Pulmonary function tests
- 4) Tests for ventilation
- 5) Test for diffusion
- 6) Tests for airway resistance
- 7) Compliance
- 8) Closing volume and closing capacity
- 9) Work of breathing
- 10) Bronchoprovocation tests

**Respiratory muscles in health and diseases**

**Control of breathing**

- 1) Central nervous mechanisms
- 2) Repetors and reflexes in the respiratory system
- 3) High-altitude physiology

**LUNG DEFENCES AND IMMUNOLOGY**

- 1) Defenses of the respiratory tract
- 2) Upper respiratory tract



3) Lower respiratory tract

**GENETICS OF LUNG DISEASE**

- a) Genetic counseling
- b) Evidence for genetic effect and the hunt for 'disease genes'
- c) Syndromes and genetic effects
- d) Cystic fibrosis
- e) Immotile cilia syndrome
- f) Atopy and associated asthma and rhinitis
- g)  $\alpha$ 1-Antitrypsin deficiency
- h) Immune system
- i) Vascular system
- j) Tumor genetics
- k) Pharmacogenetics
- l) Microbial genetics

**CLINICAL ASPECTS**

Principal symptoms of respiratory disease

- a) Cough
- b) Expectoration
- c) Hemoptysis
- d) breathlessness
- e) Chest pain wheezing
- f) Stridor
- g) Mediastinal compression
- h) Toxemia

Signs of respiratory disease

- a) Tachypnea
- b) Cyanosis
- c) Clubbing and hypertrophic osteoarthropathy
- d) Breath sounds
- e) Added sounds
- f) Pleural rub

**DIAGNOSTIC IMAGING**

- 1) Chest radiography
- 2) Computed tomography
- 3) Lung scintigraphy
- 4) Spiral CT pulmonary angiography
- 5) Magnetic resonance imaging
- 6) Fluoroscopy
- 7) Pulmonary and bronchial angiography

**MINIMALLY INVASIVE DIAGNOSTIC PROCEDURES**

- 1) Bronchoscopy and BAL



- 2) Thoracoscope
- 3) Lung biopsy

### **DRUGS IN LUNG DISEASE**

- 1) Antimicrobial agents for use against bacteria and bacteria-like organisms
- 2) Drugs used in the management of tuberculosis
- 3) Drugs used in the management of airflow limitation
- 4) Glucocorticosteroids
- 5) Cytotoxic drugs used in respiratory medicine

### **SMOKING**

- 1) Harm to smokers on the respiratory system
- 2) Harm to non-smokers
- 3) Mechanisms of harm
- 4) Effect of Smoking cessation

### **AIR POLLUTION**

- 1) Main pollutants
- 2) Carcinogens
- 3) Effects of air pollution
- 4) Indoor air pollution
- 5) Advising patients about air pollution
- 6) Control of air pollution

### **ACUTE UPPER RESPIRATORY TRACT INFECTION**

- 1) Common cold (acute coryza, nasopharyngitis)
- 2) Acute pharyngitis and tonsillitis
- 3) Acute supraglottitis (epiglottitis)
- 4) Acute laryngitis
- 5) Sinusitis (rhinosinusitis)
- 6) Acute bronchitis, tracheitis and
- 7) tracheobronchitis
- 8) Pertussis (whooping cough)

### **PNEUMONIA**

- 1) Definition
- 2) Classification and terms in common usage
- 3) Pathogenesis
- 4) Investigation
- 5) Antimicrobial treatment
- 6) Hospital-acquired (nosocomial) pneumonia
- 7) Pneumococcal pneumonia
- 8) *Legionella* pneumonia
- 9) *Mycoplasma* pneumonia
- 10) *Chlamydia* pneumonia
- 11) Staphylococcal pneumonia



- 12) Streptococcal pneumonia
- 13) *Klebsiella* pneumonia (Friedländer's pneumonia)
- 14) *Coxiella* pneumonia (Q fever)
- 15) *Pseudomonas* pneumonia
- 16) *Escherichia coli* pneumonia
- 17) Pneumonia caused by other Gram-negative aerobic opportunistic bacilli: *Enterobacter*, *Serratia*, *Proteus*, *Acinetobacter*
- 18) *Haemophilus influenzae* pneumonia
- 19) *Moraxella catarrhalis* pneumonia
- 20) Pneumonia caused by anaerobes (including aspiration pneumonia)
- 21) Rare and unusual bacterial pneumonias
- 22) Viral pneumonias
- 23) Radiation pneumonitis and fibrosis
- 24) Other forms of pneumonitis
- 25) Lipoid pneumonia
- 26) Pulmonary reactions to bronchographic contrast media

### **EMPHYEMA**

- 1) Pathology
- 2) Pathogenesis
- 3) Clinical manifestations
- 4) Diagnosis
- 5) Management

### **LUNG ABSCESS**

- 1) Mechanisms of infection
- 2) Microbiological characteristics
- 3) Pathology
- 4) Clinical features
- 5) Investigation
- 6) Management

### **TUBERCULOSIS**

- 1) Pathogenesis
- 2) Epidemiology
- 3) Prevention
- 4) Clinical features
- 5) Extra-pulmonary
- 6) Tuberculosis
- 7) Management
- 8) Opportunistic mycobacterial
- 9) Disease

### **ACTINOMYCOTIC AND FUNGAL DISEASES**

- 1) Actinomycetes
- 2) Fungi
- 3) Nocardiosis

### **PARASITIC DISEASES**





Protozoa

- a) *Trypanosoma*
- b) *Entamoeba*
- c) *Plasmodium*
- d) *Toxoplasma*

Nematoda

- a) *Trichinella*
- b) *Ascaris*
- c) *Ancylostoma*
- d) *Necator*
- e) *Strongyloides*
- f) *Toxocara*
- g) *Dirofilaria*

**CHRONIC BRONCHITIS AND EMPHYSEMA**

- 1) Definitions and terminology
- 2) Epidemiology
- 3) Aetiology
- 4) prognosis
- 5) Pathology
- 6) Pathogenesis of COPD
- 7) Pathophysiology
- 8) Clinical features
- 9) Investigations
- 10) management

**RESPIRATORY FAILURE**

- 1) Types and etiological causes
- 2) Clinical features
- 3) Diagnosis
- 4) Management

**PULMONARY EMBOLISM**

- 1) Mechanisms of thrombosis
- 2) Prevalence
- 3) Non-thrombotic pulmonary emboli
- 4) Pathophysiological response to pulmonary embolism
- 5) Clinical features
- 6) Diagnosis
- 7) Management

**PULMONARY HYPERTENSION**

- 1) Mechanics of the pulmonary circulation
- 2) Regulation of pulmonary vascular tone
- 3) Causes of pulmonary hypertension
- 4) Clinical features
- 5) Diagnosis
- 6) Management

**PULMONARY OEDEMA**



- 1) Anatomy and physiology
- 2) Clinical features
- 3) Diagnosis
- 4) Management

### **ADULT RESPIRATORY DISTRESS SYNDROME**

- 1) **Definition**
- 2) Causes
- 3) Predisposing events and predictive factors
- 4) Pathology
- 5) Pathogenesis
- 6) Pathophysiology
- 7) Clinical features
- 8) Diagnosis
- 9) Management

### **BRONCHIECTASIS**

- 1) Definition
- 2) Prevalence
- 3) Aetiology and pathogenesis
- 4) pathogenesis of bronchiectasis
- 5) Pathology
- 6) Clinical features
- 7) Diagnosis
- 8) Management

### **BRONCHIOLAR DISEASE**

- 1) Syndromes of bronchiolitis
- 2) Clinical features
- 3) Diagnosis
- 4) Management

### **CYSTIC FIBROSIS**

- 1) Genetics
- 2) pathogenesis
- 3) Pathology
- 4) Presentations
- 5) complications
- 6) Management

### **PULMONARY FIBROSIS**

- 1) Aetiology
- 2) Pathology
- 3) Pathogenesis
- 4) Differential diagnosis of diffuse interstitial lung disease
- 5) Clinical features
- 6) Diagnosis
- 7) Management

### **ASTHMA**

- 1) Definition and presentation



- 2) Epidemiology
- 3) Etiology and risk factors
- 4) Cellular and humoral mechanisms
- 5) Clinical features
- 6) Diagnosis
- 7) Management

### **REACTIVE AIRWAYS DYSFUNCTION SYNDROME**

- 1) Definition
- 2) Etiology
- 3) Clinical features
- 4) Diagnosis
- 5) Management

### **HYPERSENSITIVITY LUNG DISEASES**

- 1) Definition
- 2) Etiology
- 3) Pathology
- 4) Pathogenesis
- 5) Clinical features
- 6) Diagnosis
- 7) Management

### **PULMONARY EOSINOPHILIAS**

- 1) Definition
- 2) The eosinophil
- 3) Etiological Classification
- 4) Clinical features
- 5) Diagnosis
- 6) Management

### **SARCOIDOSIS**

- 1) Definition
- 2) Epidemiology
- 3) Aetiology
- 4) Pathology
- 5) Immunology
- 6) Modes of presentation
- 7) Investigations
- 8) Treatment

### **PULMONARY LYMPHOCYTIC ANGIITIS AND GRANULOMATOSIS**

- 1) Classical Wegener's granulomatosis
- 2) Limited Wegener's granulomatosis
- 3) Midline granuloma (nasal T-cell lymphoma)
- 4) Lymphomatoid granulomatosis
- 5) Benign lymphocytic angiitis and granulomatosis
- 6) Necrotizing sarcoid granulomatosis
- 7) Bronchocentric granulomatosis



## **LUNG CANCER**

- 1) Epidemiology
- 2) Aetiological factors
- 3) Laboratory studies
- 4) Histological classification
- 5) Clinical features
- 6) Investigation
- 7) Staging
- 8) Treatment
- 9) Paraneoplastic syndromes
- 10) Obstruction of the SVC
- 11) Prognosis
- 12) Hodgkin's lymphoma
- 13) Non-Hodgkin's lymphoma
- 14) Carcinoid tumour
- 15) Teratoma
- 16) Hamartoma
- 17) Metastatic tumours in the lung

## **DISEASES OF THE PLEURA**

- 1) Physiology of the pleura
- 2) pleurisy
- 3) Pleural effusion
- 4) Tumours of the pleura

## **PNEUMOTHORAX**

### **CHEST WALL AND NEUROMUSCULAR DISORDERS**

- 1) Congenital abnormalities of the chest wall
- 2) Acquired abnormalities of the chest wall
- 3) Tumours of the chest wall
- 4) Infections of the chest wall
- 5) Neuromuscular conditions affecting respiration

### **ABNORMALITIES AND DISEASES OF THE DIAPHRAGM**

- 1) Embryology
- 2) Radiological appearances
- 3) Function
- 4) Diaphragmatic fatigue

### **SLEEP APNOEA/HYPOPNOEA SYNDROME**

- 1) Mechanisms of upper airway narrowing
- 2) Consequences of upper airway narrowing
- 3) Consequences of sleep apnoea
- 4) Differential diagnosis
- 5) Management

### **DISEASES OF THE MEDIASTINUM**

- 1) Anatomy of the mediastinum



- 2) Mediastinal tumours and cysts
- 3) Mediastinitis
- 4) Pneumomediastinum

### **DEVELOPMENTAL DISORDERS OF THE LUNGS**

- 1) Tracheobronchial anomalies
- 2) Anomalies involving the lung parenchyma
- 3) Anomalies of the pulmonary vasculature

### **RESPIRATORY INFECTION IN THE IMMUNOSUPPRESSED**

- 1) Patterns of pulmonary complication
- 2) Clinical features of lung disease
- 3) diagnosis
- 4) HIV and AIDS
- 5) *Lymphoma*
- 6) *Pneumocystis carinii* pneumonia

### **PULMONARY MANIFESTATIONS OF SYSTEMIC DISEASE**

- 1) Inherited disorders
- 2) Acquired disorders

### **OCCUPATIONAL LUNG DISEASES DRUG-INDUCED LUNG DISEASE**

- 1) Coal worker Pneumoconioses
- 2) Asbestosis
- 3) Silicosis
- 4) Siderosis and mixed-dust pneumoconioses
- 5) Berylliosis
- 6) Byssinosis
- 7) Toxic gases and fumes

### **OXYGEN TOXICITY AND RELATED SYNDROMES**

- 1) Mechanisms
- 2) Causes
- 3) Clinical features
- 4) Managements

### **ASSISTED VENTILATION**

- 1) Principles of ventilation
- 2) Modes of ventilation
- 3) Pressure support ventilation
- 4) Aims of ventilation
- 5) Tracheostomy and endotracheal tube ventilation
- 6) Mask and mouthpiece ventilation
- 7) Negative-pressure ventilation
- 8) Weaning

### **LUNG TRANSPLANTATION**

- 1) Indications
- 2) Surgical techniques



- 3) Donor selection and lung preservation
- 4) Perioperative care
- 5) Management of complications

### **MEDICOLEGAL ASPECTS OF LUNG DISEASE**

- 1) **Medico legal ethics**
- 2) Compensation
- 3) Role of the doctor as expert

### **III -B) Tutorial / Small Group Discussions**

- 1) Interpretation of Arterial blood gases
- 2) Interpretation of pulmonary function tests
- 3) Approach to patient with Dyspnoea
- 4) Approach to patient with cough
- 5) Approach to patient with hemoptysis
- 6) Approach to patient with wheezing
- 7) Approach to patient with chest pain
- 8) Approach to patient with strider
- 9) Antimycobacterial therapy
- 10) Antibiotic and chemotherapeutics

### **III- Practical classes:**

- 1) Chest case taking and physical examination
- 2) Obstructive lung diseases
- 3) Interstitial lung diseases
- 4) Pulmonary tuberculosis
- 5) Suppurative lung diseases
- 6) Pleural effusion
- 7) Bronchogenic carcinoma
- 8) Pulmonary function tests
- 9) Intercostal intubation
- 10) Fiberoptic Bronchoscope
- 11) O<sub>2</sub> therapy
- 12) Nebulizers and inhalation therapy
- 13) Tuberculin and allergy skin testing
- 14) BCG and other vaccinations
- 15) Mechanical ventilation

### **2- Teaching and Learning methods:**

Methods used:

Facilities used for teaching this course include:

#### **LECTURE HALL:**

At the chest department. Writing board and Data show facilities are available. The Hall is will equipped with microphones and sound system

#### **CHEST HOSPITAL**

**Benha chest hospital**

#### **SMALL GROUP CLASSES:**



4 rooms at the chest department. Data show are available for use when needed.. Writing boards are not available in all rooms.

**LIBRARY:**

8<sup>th</sup> floor of Benha Faculty of medicine. E book in chest department is in progress.

**CLINICAL FACILITIES:**

Specialized outpatient clinic serving over 100 patients (once every week).

4 inpatient units in chest department

**SKILLS LAB/ MODELS:**

**Chest models are not available at the moment**

**METHODS FOR DISABLED STUDENTS:**

**No special arrangements are available.**

**N.B. We need**

Writing boards in all rooms

Chest models

**Teaching plan:**

**Lectures :**

Lectures at the lecture hall in the chest department, daily from 9.00– 11.00 am in each term. Lectures would cover diagnostic pictures, diagnostic tools and problem solving, as well as some introductory and core topics (introduction to assignment, emergencies, genetics, behavioral issues and ethics, communication skills and orientation to special services)

**Tutorials:**

Division of students into 4 groups, at the 4 rooms in the chest department twice weekly from 11.00 – 12.30 am

**Practical classes**

Students are divided into 4 groups. Each group in each room . teaching staff are available for each room . Teaching starts at 11.00 -12.30 am daily teaching will include training on history taking and clinical examination as well as presentation and discussion of clinical findings.

**Time plan:**

Item	Time schedule	Teaching hours	Total hours
Lectures	9.00 – 10.00 am Five days / month	5 hours /month	90 hrs
Practical	Daily : 11.00 – 12 am Five days / month	5 hours /month	90 hrs
Tutorial	12.30 – 1.45 pm Once a month	1.25 hours / month	22.5 hrs
Tuberculosis control	10.00 – 12.00 am Twice a month	5 hours /month	90 hrs



<b>program</b>			
<b>Total</b>		16.25 hrs / month	292.5 hrs

**3- Students assessment methods:****3-A) Attendance criteria: Faculty bylaws**

Student are graded according to the following table

- Passing grades are: EXCELLENT >85%, VERY GOOD 75- <85%, GOOD 65- <75% and FAIR 60-<65%.

**3-B) Assessment tools:**

<b>Tools</b>	<b>Purpose (ILOs)</b>
Written examination Short essay MCQs	To assess 1a, 2a1 To assess 1a., 2a3
Oral examination	To assess 2a1 ,2a2
Practical examination	To assess 1b , 2a2, 2a3, 2c1 , 2c2 , 2c4

**3-C) Time schedule : Faculty bylaws**

**FINAL EXAMINATION:** at the end of the academic term for all students.

**3-D) Weighting system:**

<b>Examination</b>			<b>Mark allocated</b>	<b>% of Total Marks</b>
Shock exams			<b>(not previously announced)</b>	Xxxx
Final exam	Written	Paper 1	250	25%
		Paper 2	250	25%
Final exam	Practical	Long case	100	10%
		Short case 1	50	5%
		Short case 2	50	5%
	Oral	Station 1	100	5%
		Station 2	50	5%
	Oral question	100	5%	
Log book			50	5%
<b>Total</b>			<b>1000</b>	<b>100%</b>

The minimum passing and passing grades (Faculty bylaws)

Fre No 5A



**Formative assessment:**

Student knows his marks after the Formative exams.

**3-E) Examinations Description:**

Examination		Description:	Marks
Shock exams		<b>Shock exams (not previously announced) based on short written questions</b>	xxx
Final exam	Written	Paper 1 :Selected MCQs &short essay questions	250
		Paper 2: Selected MCQs &short essay questions	250
		<b>Total</b>	<b>500</b>
	Practical	Long case	100
		Short case 1	50
		Short case 2	50
		<b>Total</b>	<b>200</b>
	Oral	Station 1 : X ray and CT	100
		Station 2: PFT and ABG	50
		Sation 3 : oral question	100
<b>Total</b>		<b>250</b>	
Assignment &other activities		Log book	<b>50</b>
<b>Total</b>			<b>1000</b>

**4- List of references:**

**6-1: Basic materials:** handout Overhead projections, slides and computer presentations used during teaching

**4-2: Essential books :** Crofton And Douglas's Respiratory Diseases (Set of 2 Volume) (English) 6th Edition 2008 Blackwell Science Ltd Editorial Offices: Osney Mead, Oxford OX2 0EL 25 John Street, London WC1N 2BL 23 Ainslie Place, Edinburgh EH3 6AJ 350 Main Street, Malden MA02148 5018, USA 54 University Street, Carlton Victoria 3053, Australia 10, rue Casimir Delavigne

75006 Paris, France

**4-3: Recommended books :** Crofton And Douglas's Respiratory Diseases (Set of 2 Volume)

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**4-4: periodicals, websites ....**

<http://www.chestnet.org/accp/>

<http://www.thoracic.org/>

<http://dev.ersnet.org/>

<http://erj.ersjournals.com/>

<http://thorax.bmj.com/>



**5- Facilities required for teaching and learning:**

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Course coordinator: ***Prof. Magdy Omar***

Head of department: ***Prof. Sherif Essa***

Date: 25 /08/2013