



Quality Assurance Unit



**Tanta University
Faculty of Medicine**

Department of Medical Microbiology & Immunology

Course Specifications

**Microbiology & Immunology for Chest medicine
(Master) Degree**

2021-2022

Course specification Microbiology & Immunology for Chest medicine (Master) Degree

University: Tanta

Faculty: Medicine

Department: Medical
Microbiology &
Immunology

A- administrative Information

- 1- Program title: Master degrees in chest Medicine.
- 2- Department offering the program: Department of chest Medicine.
- 3- Department responsible for the course: Medical Microbiology & Immunology
- 4- Course code: CHEST 8003 .
- 5- Level: First level
- 6- No. of Credit / taught hours:
Lectures: (0.77 /11.6h.) Practical: 0
- 7-Authorization date of course specification: 21-8-2020

B- Professional Information

1 – Overall Course aims

- 1-To understand the commonly known pathogenic organisms (Bacteria , viruses or fungi)as regards their morphology , culture characters ,biochemical reactions ,virulence characters ,pathogenesis , clinical diseases they cause, laboratory diagnosis ,treatment &prevention
- 2-To study the immune response either normal or pathological .
- 3-To understand the hospital acquired infections & how you prevent.

2 – Intended learning outcomes (ILOs):

a-knowledge and understanding:

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

- a.1-Recognize and illustrate general (bacterial, viral, fungal) morphology, physiology and genetics.
- a2- Recognize the principles of growing and cultivating microorganisms.
- a3-Determinethe scientific basis of using antimicrobial agents, their mode of action, application and complications in vivo and in vitro.

a4-Describe the host parasite relationship and microbial virulence and pathogenesis.

a5-Determine the physiology of the immune system, its structure, normal function, beneficial and harmful reactions.

a6-Identify basic and recent advances of related microorganisms of medical importance, their virulence, pathogenesis, clinical diseases they cause, diagnosis, treatment, prevention and control.

A7-Determine nosocomial infections, principles and methods of decontamination and infection prevention and control

b-intellectual skills

b.1-Compare between microorganisms (bacterium, virus or fungus), their structure and products.

b2-differentiate different laboratory procedures necessary to approach diagnosis of the common infectious clinical conditions with prioritization of the most appropriate and most cost effective tests to be used.

b3-Solve problems and Interpret results and reports of microbiological, serological, immunological and molecular tests.

b4-Predict the appropriate antibiotics used in treatment of each disease.

b5-Predict the interaction between medical practice and surrounding environment and how to achieve infection control procedures in hospitals.

3-Course contents

Topics	11.6 Hours (100%)
General bacteriology (Cell structure – Sterilization - Chemotherapy – Bacterial growth curve)	2 (16.1%)
Immunology (Antigen and antibodies - Complement- Cytokines- hypersensitivity – Cells of Immune system)	2 (16.1%)
Systemic bacteriology (Klebsiella – Streptococcus pneumoniae – Anthrax – Pseudomonas – T.B – Haemophilus–Yersinia)	5 (41.6%)

Virology (influenza Virus–Parainfluenza virus - SARS– Avian flu–Swine flu)	2 (16.1%)
Mycology (medical importance and classification- Candida - Aspergillus)	1 (8.3%)

4-Teaching and learning methods:hybride

Illustrated lectures(online) (a1-a7, b1-5)

5-Student Assessment: may be electronic but inside the faculty(face to face)

5.1 written examination. One written paper contains multiple long and short questions.

5.2 oral examination. One sitting (2-3 staff members including in this sitting)

5.1 written to assess (a1-a7, b1-5)

5.2 oral to assess (a1-a7, b1-5)

6- Assessment schedule

يعقد الاختبار مرتين سنويا في شهرى فبراير و أغسطس من كل عام و يحق للطالب التقدم وفق بنود المادة 24 من اللائحة و التى تشترط استكمال 75 % من الكورس و مثبت ذلك فى logbook و الحصول على موافقة رئيس القسم قبل شهر من موعد الامتحان.

7- Weighing of assessments

Final written examination	10 degree 60%
Oral examination	6.6 degree 40%
Total	16.6 100%

8- List of references

8.1 Course notes

8.2 Text book

Jawetz, Mel nick and Adelber's Medical microbiology

8.3 Recommended books

Mackie and McCartney practical medical microbiology – Koneman, Allen and Janda color atlas and text book of diagnostic microbiology

8.4 Periodicals and web sites

- <http://www.asm.org/>
- <http://www.phages.org/>
- <http://www.microbeworld.org/>
- <http://www.microbelibrary.org/>
- <http://www.cdc.gov/hepatitis/index.htm>
- <http://pathmicro.med.sc.edu/book/welcome.htm>

9-Other resources/ facilities required for teaching and learning to achieve the above ILOs

Lecture halls with computer & data show

10-we certified that all of the information required to deliver this course is contained in the above specifications and will be implemented

We verify that the above course and the analysis of students and external evaluator opinions are accurate.

Course coordinator: Prof. Nadya Dahy & Assi.Prof. Rasha Alam.

Head of department: Prof. Mohammed Zakaria Hussein.

Signature..... Date.....

Head of quality assurance unit: Prof. Azza Hassan.

Signature.....Date.....