COURSE SPECIFICATION

(Microbiology-HEM 507)

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course:	Postgraduate Master degree of clinical hematology/HEMA 500
(2) Department offering the programme:	Internal Medicine Department
(3) Department responsible for teaching the course:	Microbiology Department
(4) Part of the programme:	First part
(5) Date of approval by the Department`s council	26/04/2016
(6) Date of last approval of programme specification by Faculty council	9\8\2016
(7) Course title:	Microbiology
(8) Course code:	HEM 507
(9) Total teaching hours:	7.5 hours
(10) Credit hours	0.5 hour

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

1- To educate the candidate the basics of immunology including Cells of immune system and their function, Immunomodulation, Transplantation immunology, Tumor immunology, autoimmune diseases & Immune deficiency disorders.

2- To provide the candidate with the principles of nosocomial infection & infection control

3- To educate the candidate the types of infections including opportunistic infection, blood born infection & PUO.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding:

. **A1:** To identify human immunodeficiency virus-related malignancies.

A2To Explain the mechanisms of autoimmune diseases and their relation with different hematological disorders.

A3: To identify principles of, indications for and complications of autologous and allogeneic bone marrow or peripheral blood stem cell transplantation and peripheral stem cell harvests.

A4: To identify principles of molecular genetics, the nature of oncogenes and their products, and cytogenetics.

A5: To identify basics of Gene therapy.

A6To identify and recognize opportunistic and nosocomial infections which cause a great deal of drug resistance and its effect on the patient's hospital stay and how to deal with this issue.

B-- Intellectual activities:

B 3:

- To construct meaningful, supervised research experience with appropriate protected time either in blocks or concurrent with clinical rotations while maintaining the essential clinical experience.
- To expand research ideas in the fields of cloning, gene therapy and stem cell transplantation.
- To face the fears of increasing antimicrobial resistance and development of new mutations.

D- Transferable skills

D1- To participate in a multidisciplinary case management conference or discussions.

(3) Course content:

Subjects	Lecture	Clinical	Laboratory	Field	Total Teaching Hours
(1) General microbiology • Antimicrobial agents & drug resistance • Cloning strategies	1h 1h				
(2) Immunology • Cells of immune system and their function • Immunomodulation • Transplantation immunology • Tumor immunology • Autoimmune diseases • Immune deficiency disorders	1.5h				
(3)Nosocomiology and infection control: • Types of hospital acquired infections • Infection control measures used to prevent nosocomial infection • Health care workers	2h				

protection & vaccination • Health care acquired infections • Sterilization & disinfection					
(4)clinical microbiology: • PUO • Opportunistic infection • Blood born diseases	1h				
(5) virology: • Oncogenic viruses • Hepatitis • HIV	1h				
					7.5 h

(6) Teaching methods:

4.1: Power point presentation.

(7) Assessment methods:

5.1: Written and MCQ exams for assessment of knowledge and intellectual skills……etc)

5.2: Oral exam for assessment of knowledge and intellectual skills……etc)

5.3: MCQ continuous assessment exam for assessment of knowledge and intellectual skills

Assessment schedule:

Assessment 1: Final exam week/month: 25th week

Percentage of each Assessment to the total mark:

MCQ exam : : 12 marks

Written exam: 48 marks

Oral exam: 40 marks

(8) References of the course:

6.1: Hand books: Medical Microbiology and Immunology, Faculty of Medicine, Mansoura University

6.2: -Text books: Topley and Wilsons Microbiology and microbial infection,8 Volume,2005 10th Edition

- Jawetz, Melnick and Adelbergs, Medical Microbiology 2004, 23rd Edition

(9) Facilities and resources mandatory for course completion:

-Lectures Halls.

-Data Show.

Course coordinator: Prof. Sameh Shamaa

Prof. Mohamed Nasr Mabed

Prof. Emad Azmy

Head of hematology unit: Prof. Mohamed Nasr Mabed

Head of the department: Prof. Salah El-Gamal

Date of 1st approval: 22/12/2010

Date of last approval: 30/3/2016