



COURSE SPECIFICATION

(Vaccine development)

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course:	Programme for Postgraduate MD degree of Medical Microbiology and Immunology
(2) Department offering the programme:	Medical Microbiology and Immunology
(3) Department responsible for teaching the course:	Medical Microbiology and Immunology dep.
(4) Part of the programme:	Second part
(5) Date of approval by the Department's council	7/8/2016
(6) Date of last approval of programme specification by Faculty council	9/8/2016
(7) Course title:	Vaccine development
(8) Course code:	MIC607VD
(9) Credit hours	2 Credit hours
(10) Total teaching hours:	30 h lectures.

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows: (either to be written in items or as a paragraph)

To give the candidate recent and updated knowledge of vaccine development

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

- A 1 Recognize definition of Vaccines.
- A 2 Describe Vaccine-Preventable Diseases.
- A3 Recognize different types of vaccines.
- A 4 Describe the recent methods for vaccine preparation,
- A 5 Recognize advantages and disadvantages of different vaccines.
- A 6 Elicit he role of genetic engineering in vaccine development.
- A 7 Describe history of vaccine development.
- A 8 Elicit Vaccine Efficacy and Safety.

B- Intellectual skills

- B1 Explain Vaccine Efficacy and Safety.
- B2 Advice for further methods to help in vaccine preparation.
- B3 Identify stages of vaccine development.
- B4 Assess new technology in vaccine development.
- B5 Assess the role of new vaccines in prevention of emerging diseases.
- B6 Advice for protocol for Vaccine Funding.
- B7 Formulate a policy for immunization practice.

(3) Course content.

Subjects	Lectures	Laboratory	Field
Basic Concept of Vaccination	3 hours	-	-
Vaccine Efficacy and Safety	3 hours		
Different types of vaccines	3 hours		
Methods of vaccine preparation	3 hours		
Advanced technology and vaccine development	3 hours		
New vaccines for prevention of emerging diseases	3 hours		
National Immunization Recommendation Systems	3 hours		
Vaccine Implementation Options	3 hours		
Vaccine-Preventable Diseases	3 hours		
Vaccine Registration and Approval	3 hours		

(4) Teaching methods.

4.1. Lectures

4.2. Seminars

4.3. Attending workshops and conferences

4.4 Observation of, assisting and discussion with senior medical staff

(5) Assessment methods:

5.1: Written exam for assessment of ILOs number; A 1- 8.

5.2: MCQ exam for assessment of ILOs number; A 1- 8.

Assessment schedule:

Assessment 1: Final MD exam: 6 semesters after MD registration

Assessment 2: MCQ exam at the end of each semester

Percentage of each Assessment to the total mark. (total microbiology course assessment)

Written exam:...40 marks, that is 20% of the total marks.

MCQ:..... 10 marks

Other assessment without marks:

1-Candidate Logbook which should be fulfilled and signed by Head of the department.

1- Attendance Criteria: Minimum acceptance attendance is 75%

(6) References of the course:

6.1. Hand books: Department theoretical books

6.2: Text books:...

1. PhRMA_Vaccine_FactBook_2013

6.3: Journals:

1. Journal of vaccine: development and therapy

2. The official journal of: The Edward Jenner Society and The Japanese Society for Vaccinology.

6.1. Websites:

1. Center for Disease Control -www.cdc.gov
2. World Health Organization- www.who.int
3. Infectious Disease Society of America- www.idsociety.org

1. Facilities and resources mandatory for course completion.

1. Lecture halls.
2. Data shows and computer assistance.
3. Microbiology laboratory.
4. Reagents for microbiological diagnosis.

Course coordinator: Dr Enas Hammad

Head of the department: Prof. Dr. Mohammad Abou El ela

Date:

P.S. This specification must be done for each course.