



### **COURSE SPECIFICA2-6TION**

## (Advanced Medical Virology)

# Faculty of Medicine-Mansoura University

# (A) Administrative information

| (1) Programme offering the course.                                      | Programme for Postgraduate PhD degree of Medical Microbiology and Immunology |
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| (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:   | Advanced Medical Virology  |
| (8) Course code:  | MIC607AV   |
| (9) Credit hours  | 2 credits  |
| (10) Total teaching hours.  | 30 hours   |

## (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)

- 1- To provide the candidate with theoretical knowledge of advances in Medical Virology.
- 2- To give the candidate conclusive knowledge about the clinical features, etiology, pathogenesis and methods of laboratory diagnosis of viral infections and apply that knowledge in the treatment, prevention and control of communicable diseases caused by viruses.

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

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

#### A- Knowledge and Understanding

- A1 Describe the role of microvesicles in viral infections.
- A 2Outline the new methods to design an antiviral agent.
- A 3Recognize the role of Kaposi's sarcoma encoded viral interferon regulatory factors in inflammatory response and cancer,
- A 4 Illustrate the metagenomics and future prospective in viral discovery.
- A 5 List the role of single nucleotide polymorphism in response to interferon therapy

#### B- Intellectual skills

- B1 Plan for new antiviral agent development.
- B 2 Explain the underline genetics mechanisms responsible for response to interferone.
- B3 Advice for further tests necessary for full identification of new viruses.

#### (3) Course content:

| Subjects  | Lectures | Total Teaching Hours |
|---|----------|----------------------|
| Role of Kaposi's sarcoma<br>encoded viral interferon<br>regulatory factors in<br>inflammatory response and<br>cancer. | 6 hours  | 6 hours              |
| Microvesicles and viral infections  | 6 hours  | 6 hours              |
| Single nucleotide polymorphism (SNP) in response to interferon therapy  | 6 hours  | 6 hours              |
| New approaches to design an antiviral agent   | 6 hours  | 6 hours              |
| Metagenomics and future perspectives in virus discovery   | 6hours   | 6 hours              |
| Total   | 30 hours | 30 hours             |

- (4) Teaching methods.
  - 4.1. Lectures
  - 4.2. Seminars
  - 4.3. Laboratory classes.
  - 4.4. Attending workshops and conferences
  - 4.5 Observation of, assisting and discussion with senior medical staff
- (5) Assessment methods.
  - 5.1:Written exam for assessment of ILOs number; A 1-5, B 1-3
  - 5.2 MCQ: for assessment of ILOs number; A 1-5, B 1-3

Assessment schedule:

Assessment 1. Final MD exam after 6 semesters from MD registration

Assessment 2: MCQ at the end of each ssemester

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

Written exam... 40 marks,

MCQ 10 marks

- 1-Candidate Logbook which should be fulfilled and signed by Head of the department.
- 2- Attendance Criteria: Minimum acceptance attendance is 75%
- (6) References of the course.
- **6.1: Hand books:** Department theoretical books & handouts given by lecturers **6.2: Text books:...**
- 1. Topley and Wilson's Microbiology and Microbial infections. 8 volume.2005.10th edition
- 2- Jawetz, Melnick and Adelbergs Medical Microbiology, 2004, 23<sup>rd</sup> edition.

### 6.3. Journals.

- 1. Clinical Microbiology Reviews
- 2. Journal of Clinical Microbiology
- 3. Journal of Medical Microbiology
- 4. Journal of virology.

| 0.1:  | VV CD3. | ucs:      |         |        |         |
|-------|---------|-----------|---------|--------|---------|
| . Cei | nter fo | r Disease | Control | -www.c | cdc.gov |

- 2. World Health Organization- www.who.int
- 3. Infectious Disease Society of America- www.idsociety.org
- 4. National AIDS Control Organization- www.nacoindia.org

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- (7) Facilities and resources mandatory for course completion:
  - 1. Lecture halls.

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- 2. Data shows and computer assistance.
- 3. Virology laboratory.
- 4. Reagents for virological techniques.

Course coordinator: Dr. Mona B. Elhadidy

Head of the department: Prof. Mohammad Abou El-Ela

Date:

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