PROGRAMME SPECIFICATION FOR POSTGRADUATE DEGREE

This specification provides a concise summary of the main features of the course and the learning outcomes that a typical candidate might reasonably be expected to achieve and demonstrate if he or she takes full advantage of the learning opportunities provided. More detailed information on the specific learning outcomes, context and the teaching, learning and assessment
COURSE SPECIFICATION
(Medical Mycology)

Faculty of Medicine - Mansoura University

(A) Administrative information

<table>
<thead>
<tr>
<th>(1) Programme offering the course:</th>
<th>Postgraduate MD degree of Medical Microbiology and Immunology</th>
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</thead>
<tbody>
<tr>
<td>(2) Department offering the programme:</td>
<td>Medical Microbiology and Immunology</td>
</tr>
<tr>
<td>(3) Department responsible for teaching the course:</td>
<td>Medical Microbiology and Immunology dep.</td>
</tr>
<tr>
<td>(4) Part of the programme:</td>
<td>Second part</td>
</tr>
<tr>
<td>(5) Date of approval by the Department`s council</td>
<td>16-8-2010</td>
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<tr>
<td>(6) Date of last approval of programme specification by Faculty council</td>
<td>17-8-2010</td>
</tr>
<tr>
<td>(7) Course title:</td>
<td>Medical Mycology</td>
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<tr>
<td>(8) Course code:</td>
<td>MIC507Tf</td>
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<tr>
<td>(9) Total teaching hours:</td>
<td>54 hours (39h lectures, 15 h practical)</td>
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(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 give the candidate updated knowledge of the classification of fungi and their general properties including their morphology and their reproduction.
2. To educate the candidate about fungi causing superficial, subcutaneous, cutaneous and endemic mycoses.
3. To provide the candidate with updated knowledge about antifungal agents and how to perform antifungal susceptibility with emphasis on the different mechanisms of antifungal drug resistance.
4. To develop the candidate’s advanced knowledge of mycotoxins.

(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**

A.49 Outline the general properties and classification of fungi.
A.50 Describe the morphology and reproduction of fungi.
A.51 List opportunistic fungi of medical importance.
A.52 Recognize Fungi causing superficial mycoses.
A.53 Recognize Fungi causing subcutaneous mycoses.
A.54 Recognize Fungi causing cutaneous mycoses.
A.55 Recognize Fungi causing endemic mycoses.
A.56 List important antifungal agents, their classes and modes of action..
B- Intellectual skills

B40 Develop, under supervision, core reporting skills
B41 Explain the clinical features, etiology, pathogenesis of mycotic diseases
B42 Plan the laboratory investigations for the diagnosis of mycotic diseases
B43 Interpret direct smears from clinical specimens
B44 Interpret the results of culture on fungal isolation media
B45 Advice for further tests necessary for full identification of an isolated fungus
B46 Achieve a specific or differential diagnosis

C- Professional/practical skills

C28 Collect specimens for mycological diagnosis
C29 Directly examine specimens by KOH, Gram, Kinyoun’s, Giemsa, Lactophenol cotton blue stains.
C30 Examine histopathology slides for fungal infections
C31 Culture and identify pathogenic yeasts and moulds and recognition of common laboratory contaminants
C32 Special techniques like slide culture, germ tube tests.
C33 Maintenance of stock cultures.
C34 Antifungal susceptibility testing.
C35 Maintenance of stock cultures.
C36 Antifungal susceptibility testing.
C48 Conduct a scientific research
- Communication & Transferable skills

D 1 Effectively utilize the library to access and search for information.
D 2 Develop effective teaching skills by teaching junior colleagues and students as well as through conference and seminar presentations.
D 4 Search midline data base for further fungal diagnostic approaches D 5 Supervise collection, safe handling and processing of all routine specimens received in the laboratory
D 6 Utilize problem solving skills in practical situations.
D 7 Report the facts.
D 8 Supervise collection, safe handling and processing of all routine specimens received in the laboratory
D 9 Develop a sense of the continuity of identification of specimens from collection, through culture and further testing to the issuing of a final report

(3) Course content:

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Lectures</th>
<th>Clinical</th>
<th>Laboratory</th>
<th>Field</th>
<th>Total Teaching Hours</th>
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</thead>
<tbody>
<tr>
<td>Taxonomy and classification</td>
<td>2 hours</td>
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<td>2 hours</td>
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<tr>
<td>Basic morphology and reproduction of fungi</td>
<td>2 hours</td>
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<td>2 hours</td>
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<tr>
<td>Laboratory diagnosis of fungal infection</td>
<td>2 hours</td>
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<td>2 hours</td>
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<tr>
<td>Fungi causing opportunistic mycoses</td>
<td>6 hours</td>
<td>3 hours</td>
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<td></td>
<td>9 hours</td>
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<tr>
<td>Fungi causing cutaneous mycoses</td>
<td>4 hours</td>
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<td></td>
<td>4 hours</td>
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<tr>
<td>Fungi causing subcutaneous mycoses</td>
<td>6 hours</td>
<td></td>
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<td></td>
<td>6 hours</td>
</tr>
<tr>
<td>Fungi causing endemic mycoses</td>
<td>7 hours</td>
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<td>7 hours</td>
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<tr>
<td>Indoor mycotic infections</td>
<td>2 hours</td>
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<td>2 hours</td>
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<td>Cerebral mycosis</td>
<td>2 hours</td>
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<td>Mycotoxicosis</td>
<td>2 hours</td>
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<td>2 hours</td>
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<tr>
<td>Collection and direct</td>
<td></td>
<td></td>
<td>4 hours</td>
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<td>4 hours</td>
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</tbody>
</table>
examination of specimens for mycological diagnosis

| Culture and identification of pathogenic fungi | 4 hours | 4 hours |
| Antifungal susceptibility | 4 hours | 4 hours |
| Antifungal therapy and resistance | 4 hours | 4 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 49-56, B 40-46
5.2: Oral exam for assessment of ILOs number; A 49-56, B 40-46
5.3: Practical exam for assessment of ILOs number; B 40-46, C28-36,48

Assessment schedule:

Assessment 1: Final MD exam week/month 36 months from admission to the degree

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

Written exam... 240 marks, that is 40% of the total marks
Clinical exam... 150 marks, that’s is 25% of the total marks
Oral exam 150 marks, that’s is 25% of the total marks
MCQ:.......... 60 marks, that’s is 10% of the total marks
Other types of assessment.......None......... %:.................................

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. Topley and Wilson’s Microbiology and Microbial infections. 8 volume, 2005, 10th edition
6.3: Journals:
1. Clinical Microbiology Reviews
2. Journal of Clinical Microbiology
3. Journal of Medical Microbiology
4. Journal of Microbiological Methods
5. Indian Journal of Medical Research.
6.1: Websites:
Center for Disease Control - www.cdc.gov
World Health Organization- www.who.int
National Library of medicine- www.pubmed.com
MD Consult- www.mdconsult.com
1. Facilities and resources mandatory for course completion:
   1. Lecture halls.
   2. Data shows and computer assistance.
   3. Mycology laboratory.
   4. Reagents for mycological diagnosis
Course coordinator: Dr. Mona B. Elhadidy
Head of the department: Prof. Dr. Fikry El-Morsy
Date:
P.S. This specification must be done for each course.