



Program Specification for Master Degree in Internal Medicine

Program type: Single

Department offering the program: Internal medicine department

Program Code: MED 800

Total Credit points: 145

Academic year: 2015/2016

Date of approval: July 2015

**External Evaluator: Prof. Dr. Yahia Mostafa Ghanim Professor of Internal
medicine Ein-Shams University**

I. Aim of the Program

To prepare a specialist with the essential knowledge and skills who can deal with multisystem medical disorders targeting the specialties of internal Medicine with good management plans and research skills.

II. Intended Learning Outcomes of the Program (ILOs)

A. Knowledge and Understanding: By the end of the program the candidate should be able to:

- 1- Outline the basic scientific knowledge related to different medical diseases.
- 2- Distinguish the various causes of medical diseases including: Cardiology, chest, endocrinology, diabetes, neurology, gastroenterology hepatology, rheumatology, genetics, infections, hematology, and basic psychiatry.
- 3- Enumerate the clinical manifestations of common and important medical diseases
- 4- Outline the principles, the indications, and the complications, of various therapeutic modalities needed in medical diseases.
- 5- Recognize the basic normal body systems functions and distinguish it from the abnormal.

B. Intellectual Skills: By the end of the program the candidate should be able to:

1. Acquire proper scientific thinking.
2. Collect essential and accurate information about the patient and his/her family using the clinical skills (history taking, and physical examination)
- 3- Design an appropriate diagnostic plan for different medical diseases.
4. Interpret symptoms & signs,
5. Construct a differential diagnosis for medical problems

C. Professional and Practical Skills: By the end of the program the candidate should be able to:

1. Choose the most suitable medical treatment for rare and complicated medical problems.
2. Acquire medical procedures considered essential for the basics fields related to Internal medicine.
3. Construct different scientific methodologies and have critical reading abilities
4. Write scientific article according to the basics of scientific research.

D. General and Transferable Skills: By the end of the program the candidate should be able to:

- 1- Communicate with the patients to gain their confidence.
- 2- Respond effectively to a patient's emotional and psychosocial concerns
- 3- Communicate with other health care providers.
- 4- Appreciate team work.
- 5- Achieve Computer skills necessary to make use of medical data bases and use the internet for communication.

III. Academic standards

1. **Academic reference standards:** The academic standards of Internal medicine program is adopted and accredited by the departmental council
2. **External References for Standards:**
Royal colleague for physicians

IV. Program Admission Requirements

According the Faculty of Medicine, Cairo University Bylaws for Post Graduate Programs (July 2009), applicants should be graduated from approved faculty of medicine.

Admission to the program is open during January and July.

V. Program Structure and Contents

Program duration: Three academic years

Program structure: Total Credit points 145

- **First part: 1.5 year- (table 1) 55 credit points**
Candidate should fulfill the following:
 - **Compulsory courses; one academic year (30 weeks)**
 - **Basic science courses -----9 credit points**
 - Anatomy 1 credit point
 - Medical Biochemistry 1.5 credit points
 - Medical Physiology 1.5 credit points
 - Medical Microbiology & Immunology 1.5 credit points

- Medical Pharmacology 1.5 credit points
- Pathology 1.5 credit points
- Clinical pathology 0.5 credit point
- **Elective courses (two courses to be choosed)** 1 credit point
 - Critical reading 0.5 credit point
 - Scientific Writing 0.5 credit point
 - Evidence based medicine 0.5 credit point
 - Medical statistics (2) 0.5 credit point
 - Medical ethics 0.5 credit point
 - Communication skills 0.5 credit point
- **Scientific activities** 1 credit point
- **Residency training program Phase 1:**
(Basic Training Course for one year) 44 credit points
- **Second part: 1.5 years - (table 2)** **70 credit points**
Candidate should fulfill the following:
 - **Compulsory courses one academic year** 12 credit points
 - General Medicine
 - **Scientific activities** 3 credit points
 - **Residency training program phase 2:**
(Specialized training course for 2 years) 55 credit points
- **Master Thesis: completed during second part** **20 credit points**

Table 1: First part

Courses		Credit Points		
Code	Title	CPs	Total	
First part				55
Compulsory courses				
MED801	Anatomy	1	9	
MED803	Medical Biochemistry	1.5		

MED804	Medical Physiology	1.5		
MED806	Medical Microbiology & Immunology	1.5		
MED807	Medical Pharmacology	1.5		
MED808	Pathology	1.5		
MED822	Clinical pathology	0.5		
Elective courses choose 2 courses				
MEDC 1	Critical reading	0.5	1	
MEDC 2	Scientific Writing	0.5		
MEDC 3	Evidence based medicine	0.5		
MEDC 4	Medical statistics (2)	0.5		
MEDC 5	Medical ethics	0.5		
MEDC 6	Communication skills	0.5		
Scientific activities				
	Scientific activities		1	
RESIDENCY TRAINING PROGRAM				
MEDC1	Basic Training Course		44	

Table 2: Second part

Courses		Credit Points		
Code	Title	CPs	Total	
Second part			70	
Compulsory courses				
MED811T	Internal Medicine	12	12	
Scientific activities			3	
	Scientific activities		3	

RESIDENCY TRAINING PROGRAM		55	
MED811C	Specialized training course	55	
MASTER THESIS		20	
TOTAL		90	

Residency Training Program

- **Basic Training:**

According to the new Bylaws 2015 for postgraduate programs, all the students should have a basic Internal Medicine training for 18 months. During this period the students will attend the basic sciences courses as well as the general pediatric course. They also should complete the elective courses.

- **Special Training:**

All students should complete the special parts of the residency training program in the Internal Medicine. They should spend 18 months in order to acquire the needed credit points. They should spend at least 6 months in a general Internal Medicine and 6 months in the ER and 6 months in the Internal Medicine ICU. During this period the students will attend the Internal Medicine courses of the second part and will participate in the scientific activities of the department.

Master Thesis

All master-degree students should prepare a thesis in Internal Medicine. The department and the ethical committee must approve the protocol of the research. The thesis should include a review part and a research part. The thesis is supervised by one or more senior staff members and may include other specialties according to the nature of the research. The thesis should be evaluated and approved by a committee of three professors including one of the supervisors and an external professor.

Scientific Activities:

The candidates should participate in the scientific activities of the department such as:

- Seminars.
- Journal clubs.
- Scientific meetings.
- Workshops.
- Conferences.
- Thesis discussions.

Each activity is monitored and given credit points registered in a special section in the logbook. Candidates should collect the required points before allowed to sit for final exam.

INTERNAL MEDICINE MSC PROGRAM MATRIX

Courses / items		A Knowled ge and Understa nding					B Intellect ual Skills					C Professional Skills					D General and Transferable					
		1	2	3	4	5	1	2	3	4	5	1	2	3	4		1	2	3	4	5	
Code	Name																					
MED801	Anatomy	x	x	x	x	x	x	x	x								x	x	x	x	x	
MED803	Medical Biochemistry	x	x	x	x	x	x	x	x								x	x	x	x	x	
MED804	Medical Physiology	x	x	x	x	x	x	x	x								x	x	x	x	x	
MED806	Medical Microbiology & Immunology	x	x	x	x	x	x	x	x								x	x	x	x	x	
MED807	Medical Pharmacology	x	x	x	x	x	x	x	x								x	x	x	x	x	
MED808	Pathology	x	x	x	x	x	x	x	x								x	x	x	x	x	
MED822	Clinical pathology	x	x	x	x	x	x	x	x								x	x	x	x	x	
	Scientific activities								x	x							x	x	x	x	x	
MED C-1	Basic Training Course						x	x	x	x	x						x	x	x	x	x	
MED811T	Internal Medicine		x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	
	Scientific Activities								x	x	x						x	x	x	x	x	
MED811C2	Specialized training course						x	x	x	x		x	x	x	x		x	x	x	x	x	
	MSc Thesis			x								x	x	x	x		x	x	x	x	x	

VI. Regulations for Progression and Program Completion

After collecting the required credit points for the respective courses, the advanced residency training, the scientific activities, and the Thesis the student will be eligible to sit for the final examination. In case the student fails to pass the examination, he/she may resubmit for the next examination. The candidate will receive his/her degree after passing this final examination. Master degree should be obtained within a maximum of 6 years after registration date.

VII. Assessment

A. Assessment Tools

1. Final Exam Part I

Basic sciences

- Physiology, Medical Biochemistry (two separate papers): Three-hour written exam + oral exam.
- Pharmacology, Microbiology & Immunology, (two separate papers): Three-hour written exam + oral exam.
- Pathology, Clinical Pathology (two separate papers): Two-hour written exam + oral exam
- Anatomy (one paper): One and half-hour written exam + oral exam.
- Pass the elective courses

2. Final Exam Part 2

Internal Medicine: Two written exam papers three hours each + clinical exam + diagnostic tools and oral exams.

B. Assessment Schedule:

First part:

The written exam will be held on four separate days:

Day 1: Physiology, Medical Biochemistry (2 papers/3 hours)

Day 2: Pharmacology, Microbiology & Immunology, and (2 papers/3 hours)

Day 3: Pathology, Clinical Pathology (2 papers/2 hours)

Day 4: Anatomy (1 papers/1.5 hours)

This will be followed by the oral exams on separate days.

Second part:

Day 1: Internal Medicine paper 1 (3 hours)

Day 2: Internal Medicine paper 2 (3 hours)

This will be followed by the clinical exam, diagnostic tools and oral exams on separate days.

Supervision and Monitoring of Training Program

According to the Faculty of Medicine, Cairo University Bylaws for practical Training Programs, professors carry continuous assessment during the program. A practical training program logbook will be kept for each candidate to document all his/her practical activities as well as his/her participation in different scientific activities. The head of the department should allow the candidates to undergo the final examination when they complete their training program and collect the credit points needed.

C: Weighing Of Assessment

Courses		Marks			
Code	Title	Written	Oral	Clinical and diagnostics	Total
FIRST PART					
MED801	Anatomy	25	25		50
MED803	Medical Biochemistry	50	25		75

MED804	Medical Physiology	50	25		75
MED806	Medical Microbiology & Immunology	50	25		75
MED807	Medical Pharmacology	50	25		75
MED808	Pathology	45	30		75
MED822	Clinical pathology	15	10		25
Total marks of first part					450
SECOND PART					
MED811T	Internal Medicine (2 papers)	150 + 150	100	150 + 50	600
Total marks of second part					600

Remarks

- It is mandatory to pass all the papers of written exams separately.
- The passing mark in any written exam is $\geq 60\%$.

Evaluator	Tool	Sample
1. Senior Students	Questionnaire at the end of the program	All the PG students
2. Alumni	The faculty is currently developing an Alumni office for postgraduates	Not yet determined
3. Stakeholders	A meeting will be arranged during annual conference of the department	Available representatives from: <ul style="list-style-type: none"> - Army hospitals - National medical insurance - Medical syndicate - Ministry of health
4. External Evaluators	Review program and courses Attending the final exam	Once before implementation Bi-annual report
5. College Quality Assurance committee	Annual program reviewer	

Signatures

Date of approval by department:

Program coordinators:

Prof. Mona Mansour

Assit. Prof. Serag Esmat

Head of Department

Prof. Ibrahim Naguib Elebrashy

A handwritten signature in black ink, appearing to read 'I. Elebrashy', written in a cursive style.