



PROGRAMME SPECIFICATION
Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme Title & Code	Postgraduate Master degree of internal medicine MED500
(2) Final award/degree	MSc
(3) Department (s)	Internal medicine
(4) Coordinator(s)	Name: Prof Salah Elgamal Prof Omayma Saleh Prof Dina Shahen
(5) External evaluator (s)	Prof Mohamed Kamar, Professor and head of internal medicine department, Zagazig University.
(6) Date of approval by the Department`s council	5/11/2014
(7) Date of last approval of programme specification by Faculty council.	

(B) Professional information

(1) Programme Aims:

The broad aims of the Programme are as follows:

M Sc candidates must be able to provide a high standard patient care that is compassionate and effective for the treatment of internal medical conditions and the promotion of health.

They must treat their patient's conditions with practices that are safe , scientifically based, effective, efficient, timely, cost effective as well as evidence - based.

The program must integrate patient centered care with medical education .

Master graduates are expected to demonstrate the ability of :

- 1- showing competency in applying the principles , methodology and various tools of scientific research in internal medicine.
- 2- applying and use of analytical design in internal medicine specialties.
- 3-applying and integration of general knowledge with the knowledge related to the practice of internal medicine and health care .
- 4- showing awareness with the present problems ,difficult conditions as well as recent updates in internal medicine.
- 5- detection of professional problems through analytical design and findings possible solutions in these situations.
- 6- showing competency of the professional skills required by the specialist of internal medicine and use of various suitable new technologies in the practice of medicine.
- 7- effective communication and the ability of acting as a member and a leader of healthcare team in various situations .
- 8- the ability of making decisions in different situations including emergencies.
- 9- use and benefit of available resources to get the highest standards of clinical practice.
- 10- showing awareness of their role in community development and protection of the environment in the context of national and international changes.
- 11- acting with integrity, honesty and commitment with the roles and ethics of medical profession.
- 12- self development both academically and professionally and showing ability of continuous learning.

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

- A 1 recall the theoretical basis of the internal medical conditions and related subjects including the structure and functions of body organs .**
- A2 recalls the basic and clinical aspects of pharmacotherapy and its recent updates.**
- A3 recalls the basics of microbiology, applied pathology and clinical and chemical pathology relevant to internal medicine..**
- A 4 recognize the core content of general internal medicine which includes the internal medicine subspecialties, non internal medicine subspecialties and relevant non clinical topics at a level sufficient to practice internal medicine.**
- A 5 demonstrate sufficient knowledge to evaluate patients with an undiagnosed and undifferentiated presentation and recent updates and developments.**
- A 6 identify and recall treatment modalities of medical conditions commonly managed by internists as well as uncommon conditions.**
- A 7 recognize and outline initial and advanced management of emergency medical problems.**
- A8 recognize principles and basics of quality assurance in the practice of internal medicine.**
- A 9 recognize the moral ,ethical and legal principles in medical practice.**
- A10 recognize and describe ethics code in the experimental and human scientific research.**

B- Intellectual skills

- B 1 identify strengths, deficiencies, and limits in one's knowledge and expertise and be able to be updated and face challenges.**
- B 2 solve specific clinical problems despite limited resources .**
- B 3 integrate knowledge and understanding of internal medicine and other medical specialties and interpret basic clinical tests and images as well as obscure findings to solve clinical problems .**
- B4 analyze efficiently case scenarios and refer to the most appropriate diagnosis and possible differential diagnosis.**
- B5 making clinical decisions in different situations including emergencies.**
- B 6 systematically analyze practice using *quality improvement methods* , and implement changes with the goal of practice improvement and set learning and improvement goals.**
- B 7 locate , appraise , and assimilate evidence from scientific studies related to their patient's health problems , i.e. adopt an evidence based approach .**
- B 8 use information technology to optimize learning and write an essay about a specific medical problem.**
- B 9 identify and evaluate the potential risks in clinical practice of internal medicine.**

C- Professional/practical skills

C 1 demonstrate competency in history taking and clinical examination skills in different internal medicine specialties.

C2 perform and interpret laboratory and radiological findings in diagnosis and treatment of internal medical diseases.

C3 demonstrate competency in performing diagnostic and therapeutic procedures required by the medical specialists including advanced life support CVP , and Sengstaken tube insertion, difficult cases ECG interpretation, stress ECG, echocardiography, endoscopies , Liver biopsy, renal biopsy and lumbar puncture, according to their specialization.

C4 act in a consultative role to other physicians and health professionals.

C5 write and evaluate medical reports and maintain comprehensive , timely, legible medical records if applicable.

C6 provide basic preventive care and counseling.

D- Communication & Transferable skills

D 1 communicate effectively with physicians , other health professionals and health related agencies.

D 2 communicate effectively with patients , families, and the public as appropriate , across a broad range of socioeconomic and cultural backgrounds.

D 3 demonstrate the ability to interact with diverse patient population including but not limited to diversity in gender ,age , culture , race ,religion, disabilities .

D 4 demonstrate compassion , integrity and respect of others and respect for patient privacy and autonomy and demonstrate responsiveness to patient needs that supersedes self interest.

D5 use of information technology in the clinical practice.

D 6 use of different resources to gain knowledge and information.

D7 work effectively as a member or a leader of a health care team or other professional group.

D8 effective time management and continuous self learning.

D9 design roles and standards of professional evaluation of others.

(3) Academic standards:

Academic standards for the programme are attached in **Appendix I** in which **NARS** issued by the National Authority for Quality Assurance & Accreditation in Education are used. External reference points/Benchmarks are attached in **Appendix II**.

3.a- External reference points/benchmarks are selected to confirm the appropriateness of the objectives, ILOs and structure of assessment of the programme.

Accreditation council for graduate medical education

Website: www.acgme.org

3.b- Comparison of the specification to the selected external reference/ benchmark:

The aims of the Benchmark are covered by the current program .

There are differences in the credit hours and the time table of the program.

About 85% of the topics of the benchmark are covered in our program.

(4) Curriculum structure and contents:

4.a- Duration of the programme : 36 months.

4.b- programme structure:

Candidates should fulfill a total of 45 credit hours

●4.b.1: Number of credit hours:

First part:5 credit hours.

Second part:

Internal medicine course: 18 credit hours..

Log book including clinical training, workshops and training courses on diagnostic procedures: 14 credit hours.

Other scientific activities: 2 credit hours

Dissertation: 6 credit hours.

●4.b.2: Teaching hours/week:

First part: Lectures: 1 hours /week for each course (15 weeks) .

Second part:

Lectures: 3 hours /week . Seminars: 3 hour/week.

Clinical/practical: 3 hours/week . Total: 9 hours/week.

(5) Programme courses:

First part: Compulsory courses (First semester, 15 weeks)

Course Title	Course Code	NO. of hours per week				Total teaching hours
		Theoretical		Clinical /practical	Total	
		Lectures	seminars			
Clinical pharmacology	MED506	1		--	1	15
Applied Physiology	MED503	1			1	15
Applied Anatomy	MED501	1			1	7
Applied Pathology	MED505	1			1	8
Applied Microbiology	MED507	1			1	15
Clinical and chemical pathology	MED530	1			1	15
Total						75

b-Elective courses: none

Second part: a- Compulsory courses (second to fourth semesters)

Course Title	Course Code	NO. of hours per week				Total teaching hours	Credit hours
		Theoretical		Clinical /practical	Total		
		Lectures	seminars				
Internal medicine and its branches	MED510						
<u>Module I</u> = Gastroenterology , Hepatobiliary disorders = Hematology and medical oncology = General internal medicine Evidence based medicine		3	2	4		6 credit hours	

<u>Module II:</u> = Endocrinology ,Diabetes ,Metabolism and nutrition = Rheumatology and Immunology = Neurology & psychiatry = Infectious diseases = Geriatrics		3	2	4		6 credit hours
<u>Module III</u> = Cardiology =Respiratory medicine / Emergency medicine Critical care = Nephrology & electrolytes		3	1	2		5 credit Hours
<u>Elective course</u>						1 credit hour
Log book activities Including procedural skills	MED510c MED510p					15 credit hours
Dissertation (Thesis)						6 credit hours

b-Elective courses:

The candidate will choose one of the following courses (1 credit hour each)

Renal dialysis

Diabetic foot

Endoscopies

Evidence based medicine

Advanced immunology

Programme–Courses ILOs Matrix

P.S. All courses' specifications are attached in [Appendix III](#).

Course Title / Code	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	b1	b2	b3	b4	b5	b6	b7	b8	b9
Clinical pharmacology /MED506		x				x							x						
Applied Physiology / MED503	x												x						
Applied Anatomy / MED501	x												x						
Applied Pathology / MED505			x										x						
Applied Microbiology/MED507			x										x						
Clinical and chemical pathology/ MED530			x										x						
Gastroenterology & hepatobiliary disorders				x	x	x	x	x			x	x		x	x	x		x	
Endocrinology , Diabetes , metabolism and nutrition				x	x	x	x	x			x	x		x	x	x		x	
Nephrology				x	x	x	x	x			x	x		x	x	x		x	
Geriatrics				x	x	x	x	x			x	x		x	x	x		x	
Hematology and oncology				x	x	x	x	x			x	x		x	x	x		x	
Rheumatology and immunology				x	x	x	x	x			x	x		x	x	x		x	
Infectious diseases				x	x	x	x	x			x	x		x	x	x		x	
Cardiology				x	x	x	x	x			x	x		x	x	x		x	
Respiratory medicine				x	x	x	x	x			x	x		x	x	x		x	
Neurology & psychiatry				x	x	x	x	x			x	x		x	x	x		x	
Emergency medicine & critical care							x		x		x	x			x				x
General internal medicine & evidence based medicine	x			x	x	x	x	x	x		x	x	x	x			x	x	

Log book activities including Practical procedures				x	x	x	x	x	x		x				x	x			x
Dissertation (Thesis)										x						x			x

Course Title / Code	c1	c2	c3	c4	c5	c6	d1	d2	d3	d4	d5	d6	d7	d8	d9
Clinical pharmacology /MED506												x		x	
Applied Physiology / MED503												x		x	
Applied Anatomy / MED501												x		x	
Applied Pathology / MED505		x										x		x	
Applied Microbiology/MED507		x										x		x	
Clinical and chemical pathology/ MED530		x										x		x	
Gastroenterology & hepatobiliary disorders	x	x	x	x	x	x	x	x	x		x	x		x	x
Endocrinology , Diabetes , metabolism and nutrition	x	x	x	x	x	x	x	x	x		x	x	x	x	x
Nephrology	x	x	x	x	x	x	x	x	x		x	x	x	x	x
Geriatrics	x	x	x	x	x	x	x	x	x		x	x	x	x	x
Hematology and oncology	x	x	x	x	x	x	x	x	x		x	x	x	x	x
Rheumatology and immunology	x	x	x	x	x	x	x	x	x		x	x	x	x	x
Infectious diseases	x	x	x	x	x	x	x	x	x		x	x	x	x	x
Cardiology	x	x	x	x	x	x	x	x	x		x	x	x	x	x
Respiratory medicine	x	x	x	x	x	x	x	x	x		x	x	x	x	x

Neurology & psychiatry	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x
Emergency medicine & critical care	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
General internal medicine & evidence based medicine	x	x	x	x	x	x	x	x	x	x		x	x		x	x
Log book activities including Practical procedures	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Dissertation (Thesis)			x		x		x			x	x		x	x		

(6) Programme admission requirements:

- General requirements:

According to the faculty postgraduate bylaws [Appendix IV](#).

- Specific requirements (if applicable):

None

(7) Regulations for progression and programme completion:

- Student must complete minimum of 45 credit hours in order to obtain the MSc degree, which include the courses of first and second parts, thesis, activities of the log book and other activities in the department.

- Courses description are included in [Appendix III](#).

During 36 months, residents will have clinical rotation in the general medicine units and some special medicine departments (shown in the log book including the clinical training, seminars, conferences, training courses and workshops as well as attendance of thesis discussions).

The dissertation:

The postgraduate student has to prepare an essay on a chosen subject in internal medicine under the supervision of a professor of internal medicine and at least one of the assistant professors or the lecturers in the department. It is registered 6 months after starting the MSc program. An open discussion of the essay presented by the student must be accomplished before earning the degree.

The second part includes:

(covered through 18 months)

A course in internal medicine and its branches.

A clinical and practical training in internal medicine and its branches and diagnostic methods (log book activities).

The course topics are covered through:

- Lectures
- Interactive bedside teaching during clinical rotations
- Clinical seminars
- Journal clubs
- Conferences
- Self learning

- Lectures and seminars of the previously described courses must be documented in the log book and signed by the lecturer.

- Works related to thesis must be documented in the log book and signed by the supervisors.

Continuous assessment :

An MCQ exam is conducted after completion of each course of the first part and represents 20 % of the written exam of the first part

An MCQ exam is conducted after completion of each module of the second part course and the sum of the 3 exams represent 20 % of the final second part written exam,

Final exam:

الجزء الأول

إجمالي	الدرجة		الاختبار	المقرر
	شفهي	تحريري		
	60	90	إختبار تحريري (ورقتان) مدته ثلاث ساعات + اختبار شفهي	الفارماكولوجيا
	+	+		الباثولوجيا التطبيقية
	60	90		
	60	90	إختبار تحريري (ورقتان) مدته ثلاث ساعات + اختبار شفهي	الفسولوجيا التطبيقية
	+	+		التشريح التطبيقي
	60	90		
	60	90	إختبار تحريري مدته ثلاث ساعات + اختبار شفهي	الميكروبيولوجيا
	+	+		الباثولوجيا الإكلينيكية و الكيمائية
	60	90		
900	إجمالي الدرجة			

الجزء الثاني

إجمالي	الدرجة				الاختبار	المقرر
	عملي	إكلينيكي	شفهي	تحريري		
	100	100	100	150	إختباران تحريريان مدة كل منهما ثلاث ساعات + اختبار شفهي + اختبار إكلينيكي + اختبار عملي	الأمراض الباطنة العامة وفروعها
				+		
				150		
600	إجمالي الدرجة					

(8) Evaluation of Programme's intended learning outcomes (ILOs):

Evaluators	Tools*	Sample size
Internal evaluator (s) Prof Gamal Shiha Prof Mamdouh Elnahas Prof Nagy Abd-Elhady	Group discussion	
External Evaluator (s) Prof Mohamed Kamar, Professor & of internal Medicine, Zagazig university.	External evaluator checklist report	
Senior student (s)	None	
Alumni	None	
Stakeholder (s)	None	
Others	None	

We certify that all information required to deliver this programme is contained in the above specification and will be implemented. All course specification for this programme are in place.

Programme coordinators: Name: Prof Salah Elgamal Prof Omayma Saleh Prof Dina Shahen	Signature & date:
Dean: Name:	Signature & date:
Executive director of the quality assurance unit: Name:	Signature & date: