



PROGRAMME SPECIFICATION
Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme Title & Code	Postgraduate Doctorate degree of internal medicine MED600
(2) Final award/degree	MD
(3) Department (s)	Internal medicine
(4) Coordinator(s)	Prof Salah Elgamal Prof Omayma Saleh. Prof Maha Maher
(5) External evaluator (s)	Prof Mohamed Kamar, Professor of internal medicine , 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:

MD 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 and be prepared to offer consultation for other specialties as well as for junior internal medicine residents.

Postdoctoral graduates are expected to demonstrate the ability to:

- 1- demonstrate competency in principles and methodology of scientific research in internal medicine.
- 2- continuously updating knowledge of internal medicine and its specialties.
- 3- applying analytical methodology and critical appraisal of knowledge of internal medicine and other related specialties.
- 4- integration and updating of information of specialties of internal medicine with other related specialties such as basic medical sciences.
- 5- showing awareness of current problems and recent theories in internal medicine specialties.
- 6- defining professional problems and finding solutions for them.
- 7- showing competency in wide range of clinical and procedural skills in internal medicine and its specialties.
- 8- demonstrating the intention for the development of methods, tools and procedures in clinical practice.
- 9- use of suitable technologies in the field of practice of internal medicine.
- 10- effective communication and leadership of a healthcare team in different situations including emergencies.
- 11- making decisions based on available information.
- 12- efficient use of the available resources and their development and searching for newer resources.
- 13- being aware of their role in community development and environment protection.
- 14- acting with integrity, honesty and respecting medical ethics.
- 15- continuous self development and transfer of knowledge and skills to others.

(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 details of the broad spectrum of clinical disorders seen in the practice of internal medicine and show the ability to evaluate patients with an undiagnosed and undifferentiated presentation.

A 2 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 3 recall the patho-physiological basis of the internal medicine subjects.

A 4 demonstrate sufficient knowledge of the theories , principles and updates in the internal medicine specialties and related subjects.

A 4 identify and recall principles ,methodology and ethics of scientific research ,both experimental and human and its different tools.

A 5 recognize and describe the moral ,ethical and legal principles in the practice of internal medicine .

A 7 demonstrate sufficient knowledge of the principles of quality assurance in health care .

A 8 showing sufficient knowledge of environmental development and the impact of the medical practice on the environment.

B- Intellectual skills

B1 identify strengths, deficiencies, and limits in one's knowledge and expertise and be able to be updated and face challenges.

B 2 solve professional problems according to available data and set learning and improvement goals.

B 3 identify and perform appropriate learning activities and prepared to be able to transform these activities through teaching.

B 4 systematically analyze practice using *quality improvement methods* , and implement changes with the goal of practice improvement.

B 5 analyze efficiently case scenarios and refer to the most appropriate diagnosis and possible differential diagnosis and interpret basic clinical tests and images as well as obscure findings.

B6 run scientific research and formulate scientific papers.

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 participate in the education of students. patients , families , students.

B9 evaluate risks involved in clinical practice.

B10 *be creative and innovative.*

C- Professional/practical skills

C 1 show competency in basic and updated clinical examination skills and other procedures in internal medicine

C 2 act in a consultative role to other physicians and health professionals.

C 3 perform and interpret laboratory and radiological findings in diagnosis and treatment of internal medical diseases

C 4. write and evaluate medical reports and maintain comprehensive , timely, legible medical records if applicable..

C 5 use of information technology in the development of clinical practice

C6 demonstrate competency in performing diagnostic and therapeutic procedures required by the medical consultants 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.

C7 participate in development of clinical practice and evaluation of the performance of others.

D- Communication & Transferable skills

D 1 demonstrate the ability to interact with diverse patient population including but not limited to diversity in gender ,age , culture , race ,religion, disabilities.

D 2 communicate effectively with physicians , other health professionals and health related agencies.

D 3 communicate effectively with patients , families, and the public as appropriate , across a broad range of socioeconomic and cultural backgrounds

D 4 teach and evaluate the performance of others including junior residents, house officers, nurses as well as patients and their relatives.

D 5 show compassion , integrity and respect of others and respect for patient privacy and autonomy and demonstrate responsiveness to patient needs that supersedes self interest.

D 6 be prepared for continuous self learning and self evaluation.

D7 use different resources for gaining information and knowledge.

D8 work in a team and as a team leader of different working groups.

D9 run scientific meetings and show the ability of time management.

(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:

Postgraduate Medical school : Clinical MD in general internal medicine program , Buckingham university , UK.

www.buckingham.ac.uk/medicine/postgrad/med-clinical.html

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 : 42 months.

4.b- programme structure:

Candidates should fulfill a total of 60 credit hours

●4.b.1: Number of credit hours:

First part:5 credit hours.

Second part:

Internal medicine course: 25 credit hours..

Log book including clinical training, workshops and training courses on diagnostic procedures, and other scientific activities: 15 credit hours

Dissertation:15 credit hours.

●4.b.2: Teaching hours/week:

First part: Lectures: 4 hours /week (15 weeks) . Seminar: 2 hours/week

Research methodology course: 1 hour/week (12 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, 5 credit hours)

Course Title	Course Code	NO. of hours per week			Total teaching hours
		Theoretical		Total	
		Lectures	seminars		
Applied physiology	MED603	2	1	2	45
Applied pathology	MED605	2	1	2	45
Advanced studies in the medical field. a-Medical statistics. b-Research methodology. c- Use of computers in medical applications.		1		1	12
Total					102 hours

The pathology and physiology courses are covered within the first semester, by the internal medicine department staff in collaboration with physiology and pathology department , in the form of lectures and seminars.

Advanced studies in medical fields consists of one hour lecture for 12 weeks.

In the seminars, the student will present topic related to the course with emphasis on recent advances in this topic, these topics will be included in the final exam for the first part.

b-Elective courses: none

Second part: (4 semesters): A Compulsory courses :

Course Title	Course Code	NO. of hours per week			Total teaching hours	Credit hours
		Theoretical	Clinical /practical			
Internal medicine and its branches	MED610	lectures	seminars			25
<u>Module I</u> • Gastroenterology , Hepatobiliary disorders • Hematology and medical oncology		3	2	2		6 credit hours
<u>Module II:</u> • Endocrinology Diabetes ,Metabolism & clinical nutrition. * Rheumatology & Clinical immunology.		3	1	2		6 credit hours
<u>Module III:</u> Cardiology Respiratory& critical care. Renal & electrolytes.		3				6 credit hours
<u>Module IV:</u> Neurology & psychiatry Infectious diseases Geriatrics General internal medicine evidence based medicine Emergency medicine		3	1	2		5 credit hours
<u>Elective course:</u>		1		2		2 credit hours
Practical procedures				1		
Log book activities	MED610c					15 credit hours
Dissertation (Thesis)						15 credit hours

B. Elective courses:

An elective course (to fulfill 2 credit hours) is studied within one semester within module IV.

The candidate will choose one of the following courses (2 credit hours each):

- Advanced endoscopic procedures
- Advanced immunology course
- Organ transplantation
- Evidence based medicine course
- Diabetic foot course
- Renal dialysis course.

Programme–Courses ILOs Matrix

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

Course Title/ Code	Knowledge and understanding								Intellectual skills									
	a1	a2	a3	a4	a5	a6	a7	a8	b1	b2	b3	b4	b5	b6	b7	b8	b9	b10
Applied physiology/MED603			x	x										x				
Applied pathology /MED605			x	x										x				
Advanced studies in the medical field: a-Medical statistics. b-Research methodology. c -Use of computers in medical applications.					x	x	x					x		x				
Gastroenterology & Hepatobiliary disorders	x	x		x		x	x		x	x		x			x		x	
Endocrinology , Diabetes ,	x	x		x			x		x	x	x		x		x			x

Metabolism and nutrition																		
Nephrology	x	x		x		x				x	x		x					x
Geriatrics	x	x		x		x		x	x	x		x			x			x
Hematology and oncology	x	x		x		x			x	x		x			x			
Rheumatology and immunology	x	x		x		x				x		x		x	x			x
Infectious diseases	x	x		x		x		x			x	x		x				x
Cardiology	x	x		x		x				x	x		x		x			
Respiratory medicine	x	x		x		x		x	x	x								x
Neurology & psychiatry	x	x		x		x				x	x		x					x
Emergency medicine Critical care	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
Practical procedures		x					x			x			x					x
Log book activities	x	x		x		x	x	x	x	x		x	x		x	x	x	x
Dissertation (Thesis)					x	x	x			x		x		x		x		x

Course Title/Code																
	C1	C2	C3	C4	C5	C6	C7	d1	d2	d3	d4	d5	d6	d7	d8	d9
Applied physiology/ MED603													x	x		
Applied pathology/ MED605													x	x		
Advanced studies in the medical field: a-Medical statistics. b-Research methodology. c-Use of computers in medical applications				x	x		x			x	x		x	x		x
Gastroenterology & hepatobiliary disorders	x	x	x			x	x	x	x	x	x		x	x	x	x
Endocrinology , Diabetes ,Metabolism	x	x	x			x	x	x	x	x	x		x	x	x	x

and nutrition																	
Nephrology	x			x		x			x	x	x	x	x		x	x	
Geriatrics				x			x			x	x	x			x		
Hematology and oncology	x	x	x		x	x			x	x			x	x		x	
Rheumatology and immunology	x		x			x		x	x				x	x		x	
Infectious diseases		x	x		x				x	x			x	x	x		
Cardiology		x	x		x				x	x			x	x	x		
Respiratory medicine	x	x		x				x	x				x	x		x	
Neurology & psychiatry	x	x		x				x	x				x	x		x	
Emergency medicine Critical care		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	
Practical procedures		x				x	x					x	x		x	x	
Log book activities	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 60 credit hours in order to obtain the MD. degree, which include the courses of first and second parts, thesis and activities of the log book.
- Courses description are included in [Appendix III](#).

Dissertation (15 credit hours)

The postgraduate student has to prepare a thesis(registered 6 months after starting the program, during the second semester) on a chosen research topic in internal medicine under the supervision of 2 professors of internal medicine and one of the professors from other departments as well as one of the assistant professors or the lecturers in the internal medicine department.

An open discussion of the results of the study presented by the student must be accomplished before earning the degree (at least 2 years after registration).

Log book (15 credit hours , activities within the department):

- 1- Attendance of the clinics, clinical rounds and participation in procedural activities.
 - 2- Training courses to develop skills in modern diagnostics in internal medicine.
 - 3- Attendance of theses discussion and writing reports about four of them.
 - 4- Attendance of conferences and clinical seminars inside and outside the department.
 - 5- Advanced workshops.
 - 6- Journal clubs.
 - 7- Weekly seminars of different branches and monthly seminar of the whole department.
 - 8- Case presentations.
- 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.

Assessment:

الجزء الأول

الدرجة تحريري	الاختبار	المقرر
100	اختبار تحريري مدته ساعة ونصف	الفسولوجيا التطبيقية
100	اختبار تحريري مدته ساعة ونصف	الباثولوجيا التطبيقية

An MCQ exam is done after completion of first part courses which represent 20% of the first semester.

الجزء الثاني

إجمالي	الدرجة				الاختبار	المقرر
	عملي	إكلينيكي	شفهي	تحريري		
600					اختباران تحريريان مدة كل منهما ثلاث ساعات + اختبار شفهي + اختبار إكلينيكي + اختبار عملي (الوسائل التشخيصية الباطنية)	الأمراض الباطنية وفروعها
	100	100	100	120 + 120	اختبار تحريري مدته ساعة ونصف	وصف حالة
50			25	25	اختبار تحريري لمدة ساعة + اختبار شفوي أو إكلينيكي	مقرر اختياري
650	إجمالي الدرجة					

Continuous assessment:

An MCQ exam is done after completion of each module during each semester starting from the third to sixth semesters.

The sum of the 4 exams represent 20% of the final written exam

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

Evaluator	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 & Head of department of internal Medicine, Zagazig university.	External evaluator checklist report	
Senior student (s)	None	
Alumni	None	
Stakeholder (s)	None	
Others	None	

- TOOLS= QUESTIONNAIRE, INTERVIEW, WORKSHOP, COMMUNICATION, E_MAIL

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 Maha Maher	Signature & date:
Dean: Name:	Signature & date:
Executive director of the quality assurance unit: Name:	Signature & date:

P.S. The programme specification should have attached to it all courses specifications for all courses listed in the matrix.