



PROGRAMME SPECIFICATION

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme Title & Code	Postgraduate Doctorate degree of Gastroenterology and hepatology- HGMED610
(2) Final award/degree	Medical Doctorate (MD) in Gastroenterology and hepatology
(3) Department (s)	Internal medicine department Gastroenterology and hepatology Unit
(4) Coordinator(s)	Prof Salah El-Gamal (General Supervisor). Prof Hasan El-Asklany (Academic Guide).
(5) Date of approval by the Department`s council	8/2016
(6) Date of last approval of programme specification by Faculty council.	

1. Professional information

(1) Programme Aims:

The broad aims of the Programme are as follows.

- (1) Doctorate candidates must be able to provide a high standard patient care that is compassionate and effective for the treatment of Gastroenterology and hepatology conditions and the promotion of health.
- (2) They must treat their patient's conditions with practices that are safe, scientifically based, effective, efficient, timely, and cost effective as well as evidence -based.
- (3) The program must integrate patient centered care and be prepared to offer consultation for other specialties as well as for gastroenterology and hepatology residents and specialist.
- (4) Be oriented to the causation, pathogenesis, clinical features, diagnosis, management and control of liver and gastrointestinal diseases.
- (5) Be familiar with the basic interventions at the field of hepatology and gastroenterology as endoscopy and ultrasonography as well as their updates.
- (6) Demonstrate competency in principles and methodology of scientific research in gastroenterology and hepatology.
- (7) Continuously update their knowledge of gastroenterology and hepatology and its sub-divisions.

- (8) Showing awareness of current problems and recent theories in gastroenterology and hepatology.
- (9) Showing competency in wide range of clinical and procedural skills in Gastroenterology and hepatology and its sub-specialties.
- (10) Knowledge base of anatomy, physiology, nutrition and pharmacology that is relevant to the specialty.

(11) Intended Learning Outcomes (ILOs):

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

(A) Knowledge and Understanding

- A1. Recognizes well the vital physiological role of the liver and gastrointestinal tract in isolation and in relation to other body systems.
- A2. Explain the pathogenesis and pathology of various gastroenterological and liver diseases.
- A3. Define the gross radiological features in both normal and pathological states of different parts of GI and hepato-pancreatico-biliary systems.
- A4. Identify the important normal and abnormal laboratory results used in the diagnosis of GI and liver diseases.
- A5. Recognize well the pharmacodynamics and pharmacokinetics of all drugs related to GI and liver systems whether directly or indirectly and their potential side effects on these systems as well as the whole body to ensure patient safety.

A6.Classify and recognize the broad spectrum of clinical disorders including inflammatory, infectious and neoplastic diseases in the field of gastroenterology and hepatology.

A7.Recognize the modern different approaches for diagnosis through noninvasive and invasive methods and medical management of various liver and gastrointestinal diseases

A8.Identify the different emergency situations in the field of gastroenterology and hepatology as life threatening GI bleeding, vascular events and hepatic coma

A9.Describe the basic knowledge about GIT endoscopy, modalities, indications and contraindications and their updated applications.

A10.Discuss the various relevant diseases affecting pediatric, women and geriatric populations relevant to the GI and liver practice

A11.Identify and recall principles, methodology and ethics of scientific research, both experimental and human and its different tools.

A12.Recognize and describe the moral, ethical and legal principles in the practice of gastrointestinal and liver diseases.

(B) Intellectual skills

- B1.** Demonstrate the facts about the role of the GIT in transport, digestion and absorption of various nutrients.
- B2.** Integrate the role of different parts of the GIT, liver and pancreas in response to a meal.
- B3.** Integrate and analyze clinical information with the appropriate investigations to reach the correct diagnosis and/or differential diagnosis in pediatric, adults and old patients with liver and GI diseases in men and women.
- B4.** Construct an algorithmic approach to different categories of GI and liver diseases and follow its implementation in an accurate way.
- B5.** Apply the concepts of pharmacodynamics and pharmacokinetics of the drugs acting on GI and liver in his clinical practice.
- B6.** Interpret basic clinical tests and evaluate their sensitivity, specificity and accuracy in confirming or excluding the disease.
- B7.** Interpret the gross radiologic findings in GI and liver imaging evaluate their sensitivity, specificity and accuracy in confirming or excluding the disease.
- B8.** Retrieve, analyze and evaluate relevant and current data from literature and integrate them to formulate an evidence based problem solving approach in diagnosis and safe practice in the field of gastroenterology and hepatology.
- B9.** Design the initial course of management for critical emergencies as well as the long term plan of management in collaboration with other specialities.

B10.Perform extensive training in research design and methodology, for both basic science and clinical research in the field of gastroenterology and hepatology.

B11.Express ideas and scientific arguments in case reporting and problem solving debates.

(C) Professional/practical skills

By the end of the course, the students should be able to.

C1.Show competency in basic clinical examination skills to reach a provisional diagnosis.

C2.Demonstrate competency in performing diagnostic and therapeutic procedures required by the medical consultants including advanced life support, CVP, and Sengstaken tube insertion, paracentesis abdominis, endoscopies as well as abdominal ultrasonography and Liver biopsy.

C3.Provide the maximum protective measures to avoid the risks of transmission of infections to the patients, workers and visitors.

C4.Perform and interprets laboratory and radiological findings in diagnosis and treatment of gastroenterology and hepatology.

C5.Write and evaluate medical reports and maintains comprehensive, timely, legible medical records if applicable.

C6.Use recent technological tools in the professional practice of the gastroenterology and hepatology medicine.

C7. Act in a consultative role to other physicians and health professionals

C8.Participate in development of clinical practice and evaluation of the performance of junior staff and medical students.

C9. Safely and adequately perform upper and lower gastrointestinal endoscopy.

C10.Participate in public health services and screening programs e.g HCV screening, HCC screening, screening colonoscopy.

A. Communication & Transferable skills

By the end of the course, the students should be able to.

D1.Communicate efficiently with the patients and their families and knows how to deliver the data about the patient regarding his diagnosis, management plan, prognosis as well as secondary and tertiary prevention of the disease.

D2.Communicate effectively with physicians, other health professionals and health related agencies.

D3.Teach and evaluate the performance of others including junior residents, house officers, nurses as well as patients and their relatives.

D4.Work in a team and as a team leader of different working groups for safe,efficient and cost effective practice.

D5.Manage research projects, scientific seminars with good time management.

D6.Retrieve, manage and manipulate information by all means, including electronic means to be regularly updated with the recent technical innovations.

(12) **Academic standards.**

Academic standards for the program are attached in **Appendix I** in which **NARS** issued by the National Authority for Quality Assurance & Accreditation in Education are used.

3b. 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.

(13) **Curriculum structure and contents.**

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

4. b- programme structure.

Candidates should fulfill a total of 60 credit hours

A. Number of credit hours:

- **First part:**

5 credit hours.

- **Second part**

25 credit hours (Compulsory(23)+ Elective (2))=25

- **Gastroenterology and hepatology course: 23 credit hours.**

(Module I, II and III - 6 credit hours each. Module IV- 5 credit hours) .

- **Elective course : 2 credit hours**

- Log book (15 credit hours)
 - Including clinical training, workshops and training courses on diagnostic procedures.
- Dissertation: (15 credit hours) (4 semesters)
 - To be registered with the beginning of the second semester

B. Teaching

Hours/week:

- First part:
 - Lectures: 1 hour /week (15 hrs).
- Second part:
 - Lectures and Seminars: 345 hours
 - Clinical/practical: 450 hours.
 - Log book

(14) Programme courses:

A. First part:

- Compulsory courses (First semester)

Lectures: 1 hour/week (15 weeks),

Course title	Code	Lectures Hours/ week	Seminars Hours/ week	Total	Total Teaching Hours/ 15 weeks	Credit Hours
Applied Physiology:	HGMED610- HGMED603	1	-	1	15	1
Applied pathology:	HGMED610 HGMED605	1	-	1	15	1
Applied clinical pathology:	HGMED610 HGMED630	1	-	1	15	1
Basic radiology	HGMED610RA	1	-	1	15	1
Applied pharmacology	HGMED610 HGMED606	1	-	1	15	1
Total					75	5

• Elective courses: none

B. **Second part:** (4 semesters) •

I) Compulsory courses:

Course title	Code	No of Hours/ week				Total Teaching Hours/week	Credit hours
		Theoretical (hr)		Practical (hr)	total		
		Lecture	Seminar				
Gastroenterology And Hepatology course 4 modules/ 4 semesters	HGMED610						
Module 1	HGMED610 CA	4	2	-	6	90/15w	6
Module 2	HGMED610 LD	4	2	-	6	90/15 w	6
Module 3	HGMED610 GD	4	2	-	6	90/15 w	6
Module 4	HGMED610 LT	3	2	-	5	75/13 w	5
Elective	HGMED610	4	2	-	6	30/5w	2
Log book							15
Dissertation							15
Total							55

***NB: All details are mentioned in course specification sheet**

II) Elective courses: (2 credit hours, 5th semester) (5weeks)

The candidate will choose one of the following courses

Course Title	Course Code	NO. of hours per week				Programme ILOs covered (refer to the Matrix)
		Lectures	Seminars	Total hours /week	Total Hours/ 5 weeks	
Pediatrics gastrointestinal and liver diseases	HGMED610PD	2	4	6	30	A.1, B.1, 7, C7, D1-7
Women's health issues in gastrointestinal and liver diseases	HGMED610WO	2	4	6	30	A.1, B.1, 7, C7, D1-7
Gastrointestinal and liver diseases in geriatrics	HGMED610GE	2	4	6	30	A.1, B.1, 7, C7, D1-7
Intervention radiology in Gastroenterology and hepatology	HGMED610ER	2	4	6	30	A.1, B.1, 7, C7, D1-7
Advanced gastrointestinal and biliary endoscopic skills	HGMED610EN	2	4	6	30	A.1, B.1, 7, , C7, D1-7

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

C. **Dissertation** (15 credit hours)

- The postgraduate student has to prepare a thesis (registered 6 months after starting the program) on a chosen research topic in gastroenterology and hepatology under the

principal supervision of a professor in gastroenterology and hepatology unit and one of the professors from other departments as well as one of the assistant professors or the lecturers in the internal medicine department (gastroenterology and hepatology Unit).

- 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).

An accepted research paper from the dissertation must be presented before the discussion

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

1. Training courses to develop skills in modern diagnostics in gastroenterology and hepatology.
2. Attendance of theses discussion.
3. Attendance of conferences and clinical seminars inside and outside the department.
4. Advanced workshops.
5. Organizing and presentation of Journal clubs
6. Weekly seminars of different branches and monthly seminar of the whole department.
7. Case presentations.
 - Lectures and seminars of the previously described courses must be documented in the log book and signed by the lecturer.

(15) **Programme admission requirements:**

• **General requirements:**

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

● **Specific requirements (if applicable):**

None

(16) **Regulations for progression and programme completion.**

- Student must complete minimum of **60 credit hours** in order to obtain the doctorate degree, which include the courses of first and second parts, thesis and activities of the log book.
- Courses descriptions are included in [Appendix III](#).

(17) **Assessment methods.**

● **First part** (Semester 1)

1. written exam
2. online MCQ exam (20% of written exam degrees)

Course	Assessment	Marks
Applied physiology	Written exam (1hour)	100
Applied pathology	Written exam (1 hour)	100
Clinical Pharmacology	Written exam (1 hour)	100

Applied clinical pathology	Written exam (1hour)	100
Basic radiology	Written exam (1hour)	100
Total		500 marks

- **Second part:**

1. Written exam.
2. Case Scenario.
3. Clinical exam.
4. Oral exam.
5. Practical exam(OSCE)

Assessment schedule:

I. Continuous assessment after completion of each module :

4 MCQ exams during semesters 3-6, the results of the 4 exams comprise 20% of the final written exam according to the Bylaws.

II. Final exam :

Assessment 1: Written exam (essay questions and commentary).

Assessment 2: Clinical exam (OSKE short cases)

Assessment 3: Oral exam

Assessment 4: Practical (procedural skills: Endoscopy, ECG, radiology interpretation)

Percentage of each Assessment to the total mark (600 marks):

- Written exam: 240 marks+ 60 marks of commentary (50%).
- Clinical exam: 100 marks
- Oral exam: 100 marks
- Practical exam: 100 marks
- The clinical+ practical+ oral exams= (50%).
- Elective course: 50 marks= 25 Written exam+ 25 Oral exam

Other assessment without marks:

- Formative assessment for research methodology course,
- Presentation and open discussion of the MD thesis.
- Log book for assessment of the attendance and activities throughout the whole program.

Final exam:

- Exam conducted twice /year **in May and in November.**

Second part:

Total	Marks				Exam	Course
	Practical	clinical	oral	Written		
	100	100	100	120 +	2 written papers (3 hours each) + Commentary (written exam 1.5 hours)	Gastroenterology and hepatology

600				120	+oral +clinical +practical (diagnostic procedures)	course
				Commentary 60		
50	25			25	written paper (1 hour)	Elective course
650	Total					

We certify that all information required to deliver this programme is contained in the above specification and will be implemented. All course specifications for this programme are in place.	
Programme coordinators: Name: Prof Salah El-Gamal (General Supervisor): Prof Hasan El-Askany (Academic Guide):	Signature & date:
Head of Internal Medicine department. Name: Prof. salah Gamal	
Dean. Name: Prof. Saied Abd-el Hady	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.

Head of the department:

Prof Salah El-Gamal

Date: