



COURSE SPECIFICATION

Faculty of Medicine- Mansoura University

1. Administrative information

(1) Programme offering the course.	MD degree of Gastroenterology and Hepatology programme
(2) Department offering the programme.	Internal medicine department- Gastroenterology and Hepatology Unit
(3) Department responsible for teaching the course.	Internal medicine department- Gastroenterology and Hepatology Unit
(4) Part of the programme.	Second part
(5) Date of approval by the Department's council	30/11/2011
(6) Date of last approval of programme specification by Faculty council	
(7) Course title.	Gastroenterology and Hepatology course
(8) Course code.	HGMED610
(9) Credit hours.	Lectures:23 credits Clinical:15 credits
(10) Total teaching hours.	Lectures:345 Clinical:450

2. Professional information

(1) Course Aims:

Candidates are expected to learn the practice of health promotion, disease prevention, diagnosis, care, and treatment of men and women with gastrointestinal, liver, and pancreaticobiliary diseases from adolescence to old age, during health and all stages of illness.

(2) Intended Learning Outcomes (ILOs):

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

A) Knowledge and Understanding:

A1. Classify and recognize the broad spectrum of clinical disorders including inflammatory, infectious and neoplastic diseases in the field of gastroenterology and hepatology.

A2. Explain the causation, pathogenesis of various liver and gastrointestinal diseases

A.3 Recognize the different approaches for diagnosis through noninvasive and invasive methods and medical management of various liver and gastrointestinal diseases

A4. Identify the different emergency situations in the field of gastroenterology and hepatology as life threatening GI bleeding, vascular events and hepatic coma

B) Intellectual skills

B1. Integrate and analyze clinical information with the appropriate investigations to reach the correct diagnosis/ differential diagnosis.

B2. Construct an algorithmic approach to GI and liver diseases and follow its implementation in an accurate way.

B3. Design the initial course of management for critical emergencies as well as the long term plan of management.

B4. Retrieve, analyze and evaluate relevant and current data from literature and integrate them to formulate an evidence based problem solving approach in diagnosis and treatment.

C-Professional/practical skills

C1. Perform the appropriate 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.

C2. Utilize regular different electronic and practical means for lifelong continuous medical education (CME) throughout the medical profession.

C3. Provide the advices and directions for the personnel in the healthcare facility involved in patients' care to avoid the risks of transmission of infection (needle stick, infected blood products)

C4. Shows competency in decision making and following its impact on the patients' health status.

C5. Participate in public health services and screening programs e.g HCV screening, HCC screening, screening colonoscopy

D- Communication & Transferable skills

D1. Work effectively in teamwork and be willing to share all types of activities and information with both senior and junior staff

D2. Communicate efficiently with the patient and their families and how to deliver the data about the patient regarding his diagnosis, management plan, prognosis as well as secondary and tertiary prevention of the disease.

D3. Cooperate with other specialities of interest (pathologists, radiologists, laboratory physicians and GI and Liver surgeons) to reach the proper diagnosis and treatment decision for the patient.

D4. Recognize and describe the moral, ethical and legal principles in the practice of gastrointestinal and liver diseases

(3) Course content.

(A) Module I

Subjects	Lectures	Total Teaching Hours
<u>I. Approach to patients with liver diseases</u>	6	90
(A) Review of basic anatomy, histology and physiology of the liver	6	
(B) History taking in patients with liver diseases	3	
(C) Assessment of liver function tests	3	
• Routine liver biochemical tests	3	
• Tests assessing functional liver capacity	3	
• Noninvasive markers for fibrosis and cirrhosis	3	
• Liver biopsy	3	
• Portal pressure assessment	3	
• Hepatic imaging modalities	3	
• Value of ascitic fluid analysis	3	
<u>II. Approach to patients with GI diseases</u>	3	
(D) Review of basic histology and physiology of GIT	3	
(E) History taking in patients with GI diseases	6	
• Dyspepsia	6	
• Dysphagia,	3	
• Odynophagia, or noncardiac chest pain		
• Nausea and vomiting	3	
• Acute abdominal pain	3	
• Chronic abdominal pain	3	
• Gas and bloating	2	
• Diarrhea	2	
• Constipation	2	
• Functional gastrointestinal disorders	3	
• Unintentional weight loss	3	
• Upper GIT bleeding	3	
• Lower GIT bleeding	3	
• Obscure GIT bleeding	3	
	3	
	3	
	3	

(B) Module 2

Subjects	Lectures	Total Hours
(A) <u>Acute Liver injury</u>		
A. Acute liver failure	3	90
B. NASH	3	
C. Alcoholic Liver diseases	3	
D. Hepatitis viruses.A-B-C-D-E	3	
E. Toxic hepatitis	3	
F. Metabolic liver disorders :		
• Wilson's disease	3	
• Haemochromatosis	3	
• Alpha-1 AT Deficiency	3	
• Rare metabolic liver diseases	3	
G. Autoimmune liver disorders :	3	
• Autoimmune hepatitis	3	
• Primary biliary cirrhosis	3	
• Sclerosing cholangiopathies	3	
• Overlap syndromes	3	
H. Parasitic Liver diseases	3	
I. Granulomatous liver diseases	3	
J. Surgery and Liver	3	
(B) <u>Chronic Liver Diseases</u>	3	
K. Liver cirrhosis	3	
L. Portal hypertension	3	
M. Ascites	3	
N. Hepato-renal Syndrome	2	
O. Hepato- pulmonary Synd.	2	
P. Porto- pulmonary hypertension	2	
Q. Cholestasis	3	
(C) <u>Liver tumors</u>	3	
R. Evaluation of focal hepatic lesions	3	
S. Benign liver tumours	3	
T. Hepatocellular carcinoma	3	
U. Cholangio- carcinoma	3	
V. Secondary Liver malignancy	3	
(D) <u>Miscellaneous</u>	3	
W. Liver in systemic diseases	3	

X. Liver diseases in pregnancy	3	
Y. Nutrition and liver disease	3	
Z. Vascular liver disorders	3	

(C)Module 3

Subjects	Lectures	Total Teaching Hours
(A) <u>Esophageal Diseases</u>	3	90
• Motility Disorders of esophagus	3	
• GERD and Barrett's esophagus	3	
• Esophageal infections	3	
• Tumors: benign& malignant	3	
(B) <u>Gastric Diseases</u>	3	
• Disorders of gastric emptying	3	
• Peptic ulcer disease and H.pylori	3	
• Tumors: benign& malignant	3	
(C) <u>Small intestine</u>	3	
• Dysmotility of small intestine and colon: Intestinal Obstruction, ileus & pseudo-obstruction.	3	
• Celiac disease	3	
• Chronic infections of the small intestine	3	
• SIBO	3	
• Diarrhea	3	
• Vascular Disorders	3	
• Tumors: benign& malignant	3	
• Short bowel syndrome	3	
• Miscellaneous diseases of the small intestine	3	
(D) <u>Large Intestinal Diseases:</u>	3	
• Irritable Bowel Syndrome	3	
• IBD: Crohn's Dis. &Ulcerative Colitis	6	
• Non-IBD colitis	3	
• Diverticular diseases of the colon	3	
• Constipation	3	
• Colonic Polyps and Polyposis Syndromes	3	
• Colon cancer screening guidelines	3	
(E) <u>Pancreatic & Biliary diseases</u>	3	
• Pancreatitis	3	
• Pancreatic cysts	3	
• Cholecystitis	3	
• Gallstone Disease	3	
• Biliary tract dysmotility	3	

(D) Module 4

Subjects	Lectures	Total Teaching	Hours
A. Liver transplantation.	3		
Indication-modalities	3		
Pre-operative assessment and Preparation	3		
Management of patients on waiting list	3		
MELD system and alternatives	3		
Intra-operative complications	3		
Management of liver transplant patients in ICU	3		
Post-operative care of donor & Recipient	3		
Early and delayed complications	3		
Long term management of liver transplant patients	3		
B. Basic GIT Endoscopies.	3		
Endoscopy suite	3		
Endoscopic modalities	3		
Preparation for Endoscopy	3		
Principles of diagnostic Upper GIT endoscopy	3		
Therapeutic upper GIT endoscopy	3		
Principles of diagnostic colonoscopy	3		
Therapeutic colonoscopy	3		
C. Advanced GIT Endoscopies	3		
ERCP	3		
EUS	3		
Enteroscopy	3		
Capsule endoscopy	3		
D. Liver biopsy:	3		
Indications and contraindications	3		
Technique	3		
Complications	3		
		75	

4) Teaching methods.

- 4.1. Lectures
- 4.2. Meetings
- 4.3. Case presentations
- 4.4. Video demonstrations

5) Assessment methods.

- 5.1. **Written examination for assessment of knowledge and intellectual skills**
- 5.2. **Structured Oral examination for assessment of knowledge and intellectual skills**
- 5.3. **OSCE examination for assessment of practical and communication skills**
- 5.4. **MCQ examination for assessment of ILOs number knowledge and intellectual skills**
- 5.5. **Log book for activities for assessment of:** mainly for assessment of practical & transferable skills which are accepted through attending different conferences, thesis discussions, seminars, workshops, attending scientific lectures as well as self learning.
- 5.6. **The supervisor requires certain assignments:** meetings and case presentations that are evaluated and signed by the supervisors in the log book (without marks).
- 5.7. **Meetings:** the candidate should prepare and present at least one seminar in a topic related to the course and determined by the supervisors in front of the department staff (without marks).

Assessment schedule.

- I. **Continuous assessment after completion of each module :**
 - 4 MCQ exams during semesters 3-6.
- II. **Final exam (Second part exam) 3 years from admission to the program.**
 - Assessment 1. **Written exam (Short essay questions and commentary).**
 - Assessment 2. **Clinical exam (OSCE)**
 - Assessment 3. **Structured Oral exam**
 - Assessment 4. **Practical (procedural skills: Endoscopy, radiology interpretation)**

Thesis discussion.

2 years after registration of the thesis.

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

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

Periodic exam within the course following each semester (MCQ):

60 marks

Written exam: **180 marks+ 60 marks** of commentary (Written + MCQ + commentary =50%).

OSCE Clinical exam: **100 marks** (18% approximately)

Structured Oral exam: **100 marks** (18% approximately)

OSPE Practical exam: **100 marks** (18% approximately)

The clinical+ practical+ oral exams= (50%).

Final exam:

Second part:

Total	Marks					Exam	Course
	Practical	clinical	oral	MCQ	Written		
600	100	100	100	60	120 +	2 written papers (3 hours each) + Commentary (written exam 1.5 hours) +oral +clinical +practical (diagnostic procedures)	Gastroenterology and hepatology course
					120 Commentary 60		
600	Total						

6) References of the course:

6.2: Main Text books:

1) SHERLOCK'S DISEASES OF THE LIVER AND BILIARY SYSTEM

2) YAMADA'S textbook of GASTROENTEROLOGY

3) Sleisenger and Fordtran's textbook GASTROINTESTINAL AND LIVER DISEASE

6.3: Main Journals:

4) Journal of Hepatology

5) Gastroenterology

6.4: Main Websites:

6) AASLD website (<http://www.aasld.org/>)

7) ACG website (<http://www.gi.org>)

8) AGA website (www.gastro.org)

7) Facilities and resources mandatory for course completion.

- **Patient population:**
Intense inpatient and outpatient exposure to patients with a wide variety of gastrointestinal, pancreaticobiliary, and liver diseases
- **Lecture rooms:**
Available in the department
- **Computers for data analysis**
- **Data show facilities**
- **Video demonstrators**

Course coordinator:

Prof.Dr.Hasan Al-Askalany

Dr.Ahmed Marwan

Head of the department:

Prof.Dr. Salah Elgamal

Date: