



Faculty of Medicine Quality Assurance Unit

MASTER (MSC) DEGREE PROGRAM AND COURSES SPECIFICATIONS FOR Tropical Medicine and Gastroenterology

(According to currently applied credit points bylaws)

Name of department

Faculty of medicine Assiut University 2022-2023

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Master degree of Tropical Medicine and Gastroenterology

A. Basic Information

- Program Title: Master degree of Tropical Medicine and Gastroenterology.
- **Nature of the program:** Single.
- Responsible Department: Department of Tropical Medicine and Gastroenterology - Faculty of Medicine- Assiut University.
- Program Academic Director (Head of the Department):

Pr. Dr/ Magda Shehata Hassan

Coordinator (s):

Principle coordinator: Pr. Dr/ Abeer Sharaf-Eldin **Assistant coordinator (s)**

Dr/ Haidi Karam-Allah Ramadan

Dr/ Zenab Gaber Mahran

Pr. Dr/ Youssef Muhamad Swifee

Pr. Dr /Nahed Makhlouf

Pr. Dr /Elham Ahmed Hassan

Pr. Dr / Mohammed Omar

Pr. Dr/ Ahmed Farouq

Pr. Dr/ Mohamed Abdel-Sabour

Internal evaluators: Prof: Youssef Muhamad Swifee

- External evaluator: **Prof.** Khairy Hammam Morsy
- Date of Approval by the Faculty of Medicine Council of Assiut University: 23 / 9 /2014
- Date of most recent approval of program specification by the Faculty of Medicine Council of Assiut University: 27 / 11 /2022
- **4** Total number of courses: 7 courses+ 1 elective course
 - First part: 6 courses
 - Second part: 1 course

B. Professional Information

1- Program aims

1/1. To enable candidates to Acquire satisfactory level of clinical skills, bedside care skills, in addition to update medical knowledge as well as clinical experience and competence in the area of Tropical Medicine and Gastroenterology and enabling the candidates of making appropriate referrals to a subspecialist.

1/2. Provide candidates with fundamental knowledge and skills of dealing with critically ill patients, with Gastrointestinal, hepatic and infectious diseases.

1/3. To introduce candidates to the basics of scientific medical research.

1.4. Enable candidates to start professional careers as specialists in Egypt but recognized abroad.

1.5 To enable candidates to understand and get the best of published scientific research and do their own .

2- Intended learning outcomes (ILOs) <u>for the whole</u> <u>program</u>:

2/1Knowledge and understanding:

- A. Explain the essential facts and principles of relevant basic sciences including, Microbiology, Pharmacology, Parasitology, Public Health, Pathology, Anatomy, and Physiology, related to Tropical Medicine and Gastroenterology.
- B. Mention <u>essential facts</u> of clinically supportive sciences including Basics of Internal Medicine and clinical pathology related to Tropical Medicine and Gastroenterology.

- C. Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to Tropical Medicine and Gastroenterology.
- D. Give the recent and update developments in the pathogenesis, diagnosis, prevention and treatment of common diseases related to Tropical Medicine and Gastroenterology.
- E. Mention the basic ethical and medicolegal principles that should be applied in practice and are relevant to the Tropical Medicine and Gastroenterology.
- F. Mention the basics and standards of quality assurance to ensure good clinical practice in the field of Tropical Medicine and Gastroenterology.
- G. Mention the ethical and scientific principles of medical research methodology.
- H. State the impact of common health problems in the field of Tropical Medicine and Gastroenterology on the society and how good clinical practice improves these problems.

2/2 Intellectual outcomes

A. Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases of the Tropical Medicine and Gastroenterology.

B. Demonstrate an investigatory and analytic thinking approach (problem solving) to common clinical situations related to Tropical Medicine and Gastroenterology.

C. Design and /or present a case or review (through seminars/journal clubs.) in one or more of common clinical problems relevant to the field of Tropical Medicine and Gastroenterology.

D. Formulate management plans and alternative decisions in different situations in the field of Tropical Medicine and Gastroenterology.

<u>2/3 Skills</u>

2/3/1 Practical skills (Patient Care)

A. Obtain proper history and examine patients in caring and respectful behaviors.

B. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment for common conditions related to Tropical Medicine and Gastroenterology.

C. Carry out patient management plans for common conditions related Tropical Medicine and Gastroenterology.

decisions and patient education in common clinical situations related to Tropical Medicine and Gastroenterology.

E. Perform competently non invasive and invasive procedures considered essential for Tropical Medicine and Gastroenterology.

F. Provide health care services aimed at preventing health problems related to Tropical Medicine and Gastroenterology.

G. Provide patient-focused care in common conditions related to Tropical Medicine and Gastroenterology, while working with health care professionals, including those from other disciplines H. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records)

2/3/2 General skills

Including:

- Practice-based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-based Practice

Practice-Based Learning and Improvement

A. Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities and use logbooks).

B. Appraises evidence from scientific studies.

C. Conduct epidemiological Studies and surveys.

D. Perform data management including data entry and analysis using information technology to manage information, access on-line medical information; and support their own education.E. Facilitate learning of students and other health care professionals including their evaluation and assessment.

Interpersonal and Communication Skills

F. Maintain therapeutic and ethically sound relationship with patients.

G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.

H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.

I. Work effectively with others as a member of a health care team or other professional group.

Professionalism

J. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society

K. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices

L. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

Systems-Based Practice

M. Work effectively in relevant health care delivery settings and systems including good administrative and time management.

N. Practice cost-effective health care and resource allocation that does not compromise quality of care.

O. Assist patients in dealing with system complexities.

3- Program Academic Reference Standards (ARS) (Annex 2)

Academic standards for master degree in Tropical Medicine and Gastroenterology

Assiut Faculty of Medicine developed master degree programs' academic standards for different clinical specialties.

In preparing these standards, the General Academic Reference Standards for post graduate programs (GARS) were adopted. These standards set out the graduate attributes and academic characteristics that are expected to be achieved by the end of the program. These standards were approved by the Faculty Council on 17-6- 2009. These standards were revised and approved without changes by Faculty Council on 23-9-2014. These standards were re-revised and approved without changes by Faculty Council on 27-11-2022.

4- Program External References (Benchmarks)

1. ACGME (Accreditation Council for Graduate Medical Education).

http://www.acgme.org/acWebsite/navPages/nav_Public.asp 2. University of Michigan Health System, Int. med. & Gastroenterology Clinical Fellowship Program (http://www.med.umich.edu/intmed/Gastroenterology and Infectious dis/edu/fellowinfo.htm)

Comparison between program and external reference			
Item	Master Degree for	University of	
	Tropical Medicine	Michigan Health	
	And	System, Internal	
	Gastroenterology	Medicine Clinical	
		Fellowship Program	
Goals	Matched	Matched	
ILOS	Matched	Matched	
Duration	3-5 years	3 years	
Requirement	Different	Different	
Program	Different	Different	
structure			

5. Program Structure and Contents

A. Duration of program: 3 – 5 years

B. Structure of the program:

Total number of credit point: 180 (20 out of them for thesis) Didactic 40 (22.2%), practical 120 (66.7%), thesis 20 (11.1%); total 180

First part

Didactic 14 (35%), practical 24 (60%), elective course 2 CP (5%), total 40

Second part

Didactic 24, (20%) practical 96 (80%) total 120

According the currently applied credit points bylaws:

Total courses 160 credit point ``

Compulsory courses: 98.75%

Elective course: 2 credit point =1.25%

	Credit points	% from total
Basic science courses	24	13.3%
Humanity and social courses	2	1.1%
Speciality courses	134	74.5%
Others (Computer,)		
Field training	120	66.7%
Thesis	20	11.1%

C. Program Time Table

A. Duration of program 3 years maximally 5 years divided into

• Part 1: (One year)

Program-related basic science courses and ILOs Students are allowed to sit the exams of these courses after 12 months from applying to the MSc degree. One elective course can be set during either the 1st or 2nd parts.

o Thesis

For the M Sc thesis;

MSc thesis subject should be officially registered within 6 months from application to the MSc degree,

Discussion and acceptance of the thesis could be set after 12 months from registering the MSc subject;

It should be discussed and accepted before passing the second part of examination)

• Part 2 (2 years)

Program – related speciality courses and ILOs

Students are not allowed to sit the exams of these courses before 3 years from applying to the MSc degree.

The students pass if they get 50% from the written exams and 60% from oral and clinical /practical exams of each course and 60% of summation of the written exams, oral and clinical/practical exams of each course

700 marks for first part

1200 for second part

100 for elective course

Written exam 40% - 70%.

Clinical /practical and oral exams 30% - 60%.

D-courses of the program:

Courses and student work load	Course	Core CR		Fs
list	Code	Lectures	Training	total
First Part				
Basic science courses (8CP)				
1. Course 1	<u>GIT223A#</u>	2.5	-	2.5
Unit (Module) 1 (Microbiology)				
Unit (Module) 2 Pharmacology				
2. Course 2	<u>GIT223B#</u>	2.5	-	2.5
Unit (Module) 1 (Parasitology)				
Unit (Module) 2(Public				
Health)		2		
3. Course 3	<u>GIT223C#</u>	2	-	2
Unit (Module) 1				
(Pathology)				
Unit (Module) 2				
Anatomy 4. Course 4	GIT206			1
Physiology	011200	1	-	1
General clinical compulsory				
courses (6 points)				
5.Course 5 (Internal Medicine)	GIT218	3	-	3
6- Course 6 Clinical pathology	<u>GIT231</u>	3	-	3
Elective courses*		2CP		
Clinical training and scientific				
activities:			1	
Clinical training in General				
Clinical compulsory courses				
(10 CP)			7	
Internal Medicine			3	10
Clinical pathology			5	
Clinical training and scientific				
activities in Speciality course (14 CP)				

Tropical Medicine and			14	
Gastroenterology				
Total of the first part		16	24	40
Second Part	Sp	eciality co	urses 24 C	P
	Spec	iality Clinic	al Work 9	6 CP
Speciality Courses	<u>GIT223D</u>	24		24
1) Course 7 Tropical Medicine and Gastroenterology*				
Training and practical	GIT223D		96	96
activities in speciality (96 CP)				
Total of the second part		24	96	120
Thesis	20 CP			
Total of the degree	180			

* Elective courses can be taken during either the 1st or 2nd parts.

Student work load calculation:

Work load hours are scheduled depending on the type of activities and targeted competences and skills in different courses

Elective Courses#:

- Medical statistics.
- Evidence based medicine.
- Medicolegal Aspects and Ethics in Medical Practice and Scientific Research
- Quality assurance of medical education
- Quality assurance of clinical practice.
- Hospital management

One of the above mentioned courses are prerequisites for fulfillment of the degree.

Thesis:

20 CP are appointed to the completion and acceptance of the thesis.

*Tropical Medicine and Gastroenterology Course

Units' Titles' list	%	Level	Core Credit points		
	from	(Year)	Didactic	Training	total
	total				
	Marks				
1) Unit (Module) 1	25%	1, 2, 3	6	27.5	33.5
Gastroenterology					
2) Unit (Module) 2	25%	1, 2, 3	6	27.5	33.5
Hepatology					
3) Unit (Module) 3					
Infectious Diseases	25%	2, 3	6	27.5	33.5
4) Unit (Module) 4	5%	2, 3	1	5.5	6.5
Nutrition					
5) Unit (Module) 5	5%	2, 3	1	5.5	6.5
Hematology					
6) Unit (Module) 6	15%	1,2, 3	4	16.5	20.5
Tropical Emergencies.					
Total No. of Units	100%		24	110	134
(6 Modules):					

6. Courses Contents (Annex 1)

The competency based objectives for each course/module/rotation are specified in conjunction with teaching/training methods, requirements for achieving these objectives and assessment methods.

See Annex 1 for detailed specifications for each course/ module

7-Admission requirements

Admission Requirements (prerequisites) if any :

I. General Requirements:

a. MBBCh Degree from any Egyptian Faculties of Medicine

b. Equivalent Degree from medical schools abroad approved by the Ministry of Higher Education

II. Specific Requirements:

- Fluent in English (study language)

VACATIONS AND STUDY LEAVE

The current departmental policy is the current departmental policy is to give working residents 2 week leave prior to first/ second part exams.

FEES:

As regulated by the postgraduate studies rules and approved by the faculty vice dean of post graduate studies and the faculty and university councils.

8-Progression and completion requirements

- Examinations of the first part could be set at 12 months from registering to the MSc degree.
- Examination of the second part cannot be set before 3 years from registering to the degree.
- Discussion of the MSc thesis could be set after 1 year from officially registering the MSc subject before setting the second part exams.
- **4** The minimum duration of the program is 3 years.

The students are offered the degree when:

1. Passing the exams of all basic science, elective and speciality courses of this program as regulated by the post graduates approved rules by the faculty council.

- 2. Completing all scheduled CP and log book (minimum 80%).
- 3. Discussion and acceptance of the MSc_thesis.

9- Program assessment methods and rules (Annex IV)

Method	ILOs measured
Written examinations:	K & I
Structured essay questions	
Objective questions:	
MCQ	
Problem solving	
Clinical:	K ,I, P &G skills
Long/short cases	
OSCE	
Structured oral	K ,I &G skills
Logbook assessment	All
Research assignment	I &G skills

Weighting of assessments:

Courses	Course	Written	Degree	9	Total
	Code	Exam	Oral Exam *	Practical / Clinical Exam	
		First part	·		
Basic science courses:					
1. Course 1 Unit (Module) 1 (Microbiology) Unit (Module) 2	GIT223A#	75	50	-	125
Pharmacology					
2. Course 2 Unit (Module) 1 (Parasitology) Unit (Module) 2 (Public Health)	GIT223B#	75	50	-	125
3. Course 3 Unit (Module) 1 (Pathology) Unit (Module) 2 Anatomy	GIT223C#	50	50	-	100
4. Course 4 Physiology	GIT206	25	25	-	50
Course 5(Internal Medicine)	GIT218	125	45	80	250
6- Course 6 Clinical Pathology	GIT 223	25	25	-	50
Total of the first part					700
	Second Part				
Speciality Courses:					
1) Course 7 Tropical Medicine and Gastroenterology Paper 1	CHT223D	480 120	240	480	1200

Paper2	120		
Paper 3	120		
Paper 4	120		
Total of the degree			1900
Elective course	50	50	100

* 25% of the oral exam for assessment of logbook

700 marks for first part

1200 for second part

Written exam 40% (480 marks).

Clinical/practical and oral exams 60% (720 marks)

4 Examination system:

> First part:

- Written exam 3 hours in Microbiology and Pharmacology + Oral exam
- Written exam 3 hours in Public Health + Parasitology + Oral exam
- Written exam 2 hours in Pathology + Anatomy + Oral exam
- Written exam 1 hours in Physiology + Oral exam
- Written exam 3 hours in Internal Medicine + Oral exam+ Clinical exam
- Written exam 1 hours in Clinical pathology + Oral exam

> Second part:

 Written exam 4 papers 3 hours for each in Tropical Medicine and gastroenterology + Oral exam+ Clinical /practical exam

Elective courses

• Written exam one paper 1 hour in Elective course + Oral & Practical exam

10-Program evaluation		
By whom	Method	sample
Quality Assurance Unit	Reports	#
	Field visits	
External Evaluator (s):According	Reports	#
to department council	Field visits	
External Examiner (s): According		
to department council		
Stakeholders	Reports	#
	Field visits	
	Questionnaires	
Senior students	Questionnaires	#
Alumni	Questionnaires	#

#Annex 5 contains evaluation templates and reports (Joined in the departmental folder).

11-Declaration

We certify that all of the information required to deliver this program is contained in the above specification and will be implemented.

All course specifications for this program are in place.

Contributor	Name	Signature	Date
Program Principle Coordinator:	Pr. Dr/ Abeer Sharaf-Eldin		5/2022
Head of the Responsible	Pr. Dr/ Magda Shehata		5/2022
Department (Program			
Academic Director):			

Annex 1, Specifications for Courses / Modules

Annex 1: specifications for courses/

First Part

Course 1 Microbiology and Pharmacology

Course 1 Unit (Module) 1 (Microbiology)

Name of department: Tropical Medicine and Gastroenterology Faculty of medicine

Assiut University

2022-2023

1. Unit data

- **4** Course Title: Microbiology
- Unit code: GIT223A#
- **Speciality: Tropical Medicine and gastroenterology.**
- Number of Credit point: Didactic 1.25, (100%) practical 0(0%) total 1.25 CP.
- Department (s) delivering the Unit: Microbiology in conjunction with Tropical Medicine and gastroenterology.

Coordinator (s): Staff members of Microbiology Department in conjunction with Tropical Medicine and gastroenterology Department as annually approved by both departments councils

- **4** Date last reviewed: May 2022.
- General requirements (prerequisites) if any : None
- Requirements from the students to achieve course ILOs are clarified in the joining log book.

2. Unit Aims

-The student should acquire the facts of microbiology necessary for tropical medicine and gastroenterology.

3. Intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
 A. Describe Principles of Microbiology of: General bacteriology Bacterial structure, growth and metabolism Bacterial genetics Antimicrobial agents and resistance to antimicrobials. Specific microorganisms and diseases as Salmonella and other gram negative organisms, Tuberculosis, brucellosis, Staphylococci and streptococci Immunology Basic immunology Immunologic diagnostic test and serology Tumor immunology General virology Interferon and antiviral agents Sterilization Nosocomial (hospital acquired) infection PUO Water born infection and milk born infection Blood transmitted infection. 	-Lectures -Laboratory work	-Written and oral examination -Assessment of practical skills - Log book

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of microbiology with clinical reasoning, diagnosis and management of common diseases related to Tropical Medicine and gastroenterology	Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book

C-Practical skills = 0

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/	Methods of Evaluation
	learning	
A-Use information technology to manage information, access on-line medical information; and support their own education		Oral Exam Logbook

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in common condition mentioned in A.A	-Observation and supervision -Written and oral communication	Oral Exam Logbook Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles	Senior Staff Experience	Oral Exam Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	J

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
General bacteriology				
Bacterial structure, growth and metabolism	A	A	-	A-D
Bacterial genetics	A	А	-	A-D
Antimicrobial agents and resistance to antimicrobials.	A	A	-	A-D
Specific microorganisms and diseases as Salmonella and other gram negative organisms, Tuberculosis, brucellosis, Staphylococci and streptococci	A	A	-	A-D
Immunology				
Basic immunology	A	A	-	A-D
Immunologic diagnostic test and serology	A		-	A-D
Tumor immunology	A	A	-	A-D
General virology				
 Interferon and antiviral agents 	A	А	-	A-D
Sterilization	А	A	-	A-D
Nosocomial (hospital acquired) infection	A	A	-	A-D

PUO	А	А	-	A-D
Water born infection and milk born infection	A	A	-	A-D
Blood transmitted infection.	A	A	-	A-D

5. Course Methods of teaching/learning:

- **1**. Didactic (lectures, seminars, tutorial)
- 2. Observation and supervision
- 3. Written & oral communication
- 4. Senior staff experience

6. Course Methods of teaching/learning: for students with poor achievements

- Extra Didactic (lectures, seminars, tutorial) according to their needs
- **2.** Extra Laboratory work according to their needs

7. Course assessment methods:

i. Assessment tools:

- 1- Written and oral examination
- 2- Log book
- ii. Time schedule: At the end of the first part
- iii. Marks: 62.5

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies
- ii. Essential books
 - Jawetz, Melnick, & Adelberg's Medical Microbiology, 25th Edition
- iii. Recommended books
 - Sherris Medical Microbiology, Fifth Edition

- Microbiology, 2nd edition: Books: by Richard A. Harvey, Pamela
- Appleton and Lange Review of Microbiology

iv. Periodicals, Web sites, ... etc

-Journal of clinical microbiology

-Microbiology

-Journal of Medical microbiology

v. others

None

Course 1 Unit (Module) 2 (Pharmacology)

1. Unit data

- ∔ Unit Title: Pharmacology
- Course code: GIT223A#
- **4** Speciality: is Tropical Medicine and gastroenterology.
- Number of Credit point: Didactic 1.25, (100%) practical
 0(0%) total 1.25 CP.
- Department (s) delivering the Unit: Pharmacology in conjunction with Tropical Medicine and gastroenterology.
- Coordinator (s):
- Staff members of Pharmacology Department in conjunction with Tropical Medicine and gastroenterology Department as annually approved by both departments councils
- 🖊 Date last reviewed: May 2022.
- 🖊 Requirements (prerequisites) if any :
 - **4** None

2. Unit Aims

-The student should acquire the principals of Pharmacology necessary for management of common Tropical medicine and gastroenterology diseases.

3. Intended learning outcomes (ILOs):

A-Knowledge and understanding				
Methods of	Methods of			
teaching/	Evaluation			
learning				
-Lectures	-Written and			
-Laboratory	oral			
work	examination -Assessment			
	of practical			
	skills - Log book			
	Methods of teaching/ learning -Lectures -Laboratory			

A-Knowledge and understanding

-Drug induced liver diseases.	
Antimicrobial Chemotherapy	
-Anti tuberculosis therapy: isoniazide, ethambutol,	
pyrazinamide, ethionamide.	
-Anti fungal therapy: fluconazole, voriconazole	
- Anti-emetic agents: metoclopramide, ondansetron.	
- Drugs for biliary diseases: ursodeoxycholic acid,	
cholestyramine	

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
 A. Correlates the facts of pharmacology with	Didactic	-Written
clinical reasoning, diagnosis and management	(lectures,	and oral
of common diseases related to Tropical	seminars,	examination
Medicine and gastroenterology	tutorial)	-Log book

C- Practical skills = 0

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A-Use information technology to manage information, access on-line medical information; and support their own education		Oral Exam Logbook

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in common condition mentioned		Oral Exam
in A.A	and	Logbook
	supervision	Check list
	-Written and	
	oral	
	communication	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles	Senior Staff Experience	Oral Exam Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery	-Observation	360o global
settings and systems.	-Senior staff	rating
	experience	

Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First Part

Торіс	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
-Anti parasitic drugs	A	А	-	A-D
-Antiviral drugs	A	A	-	A-D
-Anti ulcer drugs	А	A	-	A-D
Drugs for diarrhea	A	А	-	A-D
-	A	А	-	A-D
Drugs of portal hypertension	A	A	-	A-D
- Diuretics	A	A	-	A-D
 Drugs of Hepatic encephalopathy 	A	A	-	A-D
Drug induced liver diseases	A	А	-	A-D
-Drugs contraindicated in liver patients	A	A	-	A-D
Antimicrobial Chemotherapy	A	A	-	A-D
-Ant tuberculosis drugs (TB chemotherapy	A	A	-	A-D
-Anti fungal therapy	A	A	-	A-D
- Anti-emetic agents	А	А	-	A-D
- Drugs for biliary diseases	А	А	-	A-D

5. Course Methods of teaching/learning:

- **1** Didactic (lectures, seminars, tutorial)
- 2 Observation and supervision
- 3 Written & oral communication
- 4 Senior staff experience

6. Course Methods of teaching/learning: for students with poor achievements

- 1. Extra Didactic (lectures, seminars, tutorial) according to their needs
- 2. Extra Laboratory work according to their needs

7. Course assessment methods:

i. Assessment tools:

- 1- Written and oral examination
- 2- Log book

ii. Time schedule: At the end of the first part

iii. Marks: 62.5

8. List of references

i. Lectures notes

Prepared by the staff members of the pharmacology department

 Basic & Clinical Pharmacology, 11th Edition. By Bertram Katzung, Anthony Trevor, Susan Masters. Publisher: McGraw-Hill.

iii. Recommended books

• Godman Gilmans. The pharmacological therapeutics. 11th Ed

iv. Periodicals, Web sites, ... etc

British journal of pharmacology

9. Signature

Course Coordinator		
Unit 1 Coordinator: Head of the Department:		
Date:	Date:	
Unit 2 Coordinator:	Head of the Department:	
Date:	Date:	

Course 2 Parasitology and Public health

Name of department: Tropical Medicine and Gastroenterology Faculty of medicine Assiut University 2022-2023

Course 2 Unit (Module) 1 (Parasitology)

1. Unit data

- ∔ 🛛 Unit Title: Parasitology
- Course code: GIT223B#
- **4** Speciality: is Tropical Medicine and gastroenterology.
- Number of Credit point: Didactic 1.25, (100%) practical 0
 (0%) total 1.25.
- Department (s) delivering the course: Parasitology in conjunction with Tropical Medicine.
- Coordinator (s): Staff members of Parasitology Department in conjunction with Tropical Medicine Department as annually approved by both departments councils
- Date last reviewed: May 2022
- Requirements (prerequisites) if any :
- **4** None

2. Unit Aims

-The student should acquire the principals of Parasitology necessary for Tropical medicine and gastroenterology in clinical reasoning, diagnosis and management.

3. Intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs		Methods of Evaluation
	teaching/	Evaluation
	Learning	
A. Describe Principles of parasitology including:	-Lectures	-Written and
-Helminthic infestations (details)		oral
-Protozoal infestations		examination
-Clinical Parasitology		Log book

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
 B. Correlates the facts of Parasitology with	Didactic	-Written
clinical reasoning, diagnosis and management	(lectures,	and oral
of common diseases related to Tropical	seminars,	examination
Medicine and gastroenterology	tutorial)	-Log book

C- Practical skills = 0

D-General Skills

Practice-Based Learning and Improvement

ractice-based Learning and improvement			
ILOs	Methods of	Methods of	
	teaching/	Evaluation	
	learning		
A-Use information technology to manage	-Observation and	Oral Exam	
information, access on-line medical	supervision	Logbook	
information; and support their own education	-Written and oral		
	communication		
Interpersonal and Communication Skills			
ILOs	Methods of	Methods of	
	teaching/	Evaluation	
	learning		
B. Write a report in common condition	-Observation and	Oral Exam	
mentioned in A.A	supervision	Logbook	
	-Written and oral	Check list	
	communication		

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles	Senior Staff Experience	Oral Exam Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery	-Observation	360o global
settings and systems.	-Senior staff	rating
	experience	

Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First Part

Торіс	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
Helminthic infestations (details)	A	A	-	A-D
-Protozoal infestations	A	A	-	A-D
-Clinical Parasitology	A	А	-	A-D
-Basic Knowledge in clinical Parasitology	A	A	-	A-D

5. Course Methods of teaching/learning:

- **1** Didactic (lectures, seminars, tutorial)
- 2 Observation and supervision
- 3 Written & oral communication
- 4 Senior staff experience

6. Course Methods of teaching/learning: for students with poor achievements

- 1. Extra Didactic (lectures, seminars, tutorial) according to their needs
- 2. Extra Laboratory work according to their needs

7. Course assessment methods:

i. Assessment tools:

- 1- Written and oral examination
- 2- Log book
- ii. Time schedule: At the end of the first part
- iii. Marks: 62.5

8. List of references

i. Lectures notes

prepared by the staff members of the parasitology department

ii. Essential books

Foundations of Parasitology (Paperback edition) by Larry S Roberts, John Janovy

iii. Recommended books

Medical Diagnostic Parasitology By Lynne Shore Garcia iv. Periodicals, Web sites, ... etc

- Journal of Parasitology,
- Journal of Helminthology
- www.Pubmed.com

v. others None

Course 2 Unit (Module) 2 (Public health)

1. Unit data

- 4 Unit Title: Public Health
- **4** Unit code: GIT223B #
- Speciality is Tropical Medicine and Gastroenterology
- Wumber of Credit point: Didactic 1.25, (100 %) practical 0 (0 %), total 1.25 CP.
- Department (s) delivering the course: Public Health in conjunction with Tropical Medicine and Gastroenterology
- Coordinator (s): Staff members of Public Health Department in conjunction with Tropical Medicine and Gastroenterology annually approved by both departments councils
- **4** Date last reviewed: May 2022
- Requirements (prerequisites) if any :
- \rm 🖊 None

2. Course aims

-The student should acquire the facts of Public health necessary for Tropical Medicine and Gastroenterology.

- The student should be community oriented and capable of responding to community health needs within the primary health care setting according to the Guidelines of Ministry of Health (MOHP).

3. Intended learning outcomes (ILOs):

A-Knowledge and understanding

В-

D-		
ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
 A. Describe Principles of epidemiology of: Vaccination of common infectious diseases. Role of vaccination in prevention of infectious diseases. Epidemiology of Tropical communicable and non communicable diseases. As Hepatitis, brucellosis, Tuberculosis, meninigitis, typhoid. Epidemiological community task forces in case of global pandemics Basics of Medical statistics as: (Methods of data collection, Select, apply and interpret the proper test of significance and sample size collection) 	-Lectures	-Written and oral examination - Log book
 B- Describe details epidemiology of: -Selected communicable diseases as Viral Hepatitis -Nosocomial Infection 	-Lectures	-Written and oral examination - Log book

C- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation	
 A. Correlates the facts of Public Health with clinical reasoning, diagnosis and management of common diseases related to Tropical Medicine and Gastroenterology. 	 Didactic (lectures, seminars, tutorial) 	Written and oral examination Log book	
 B-Participate in conducting public health surveillance related to Tropical Medicine and Gastroenterology. 	 Didactic (lectures, seminars, tutorial) 	 Written and oral examination - Log book 	

D-Practical skills = 0

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A-Use information technology to manage information, access on-line medical information; and support their own education		Oral Exam Logbook

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in common condition	-Observation and	Oral Exam
mentioned in A.A and A.B	supervision	Logbook
	-Written and oral	Check list
	communication	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles	Senior Staff Experience	Oral Exam Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	0

4. Course contents (topic s/modules/rotation Course Matrix				
Time Schedule: First	t Part			
Торіс		Covered	l ILOs	
	Knowledge A	Intellectual B	Practical skill C	General Skills D
<i>Describe</i> Principles of epidemiology of:				
-Vaccination	А	В	-	A-D
- Epidemiology of Tropical communicable and non communicable diseases	A	A & B	-	A-D
-Medical statistics	А	А	-	A-D
<i>Describe</i> details epidemiology of:				
-Selected communicable diseases as Viral Hepatitis	В	A & B	-	A-D
-Nosocomial Infection	В	A & B	-	A-D
Epidemiological community task forces in case of global pandemics	A	A&B	-	A-D

5. Course Methods of teaching/learning:

- **1**. Didactic (lectures, seminars, tutorial)
- 2. Computer lab
- 3. Observation and supervision
- 4. Written & oral communication
- 5. Senior staff experience

6. Course Methods of teaching/learning: for students with poor achievements

- Extra Didactic (lectures, seminars, tutorial) according to their needs
- **2.** Extra Laboratory work according to their needs

7. Course assessment methods:

- i. Assessment tools:
 - **1-** Written and oral examination
 - 2- Log book
- ii. Time schedule: At the end of the first part

iii. Marks: 62.5

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Maxcy-Rosenau (2008): Public health and preventive medicine, Prentice- Hall International Inc. 15th edition
- (Cecil text book of medicine)
- Current medical diagnosis and treatment

iii. Recommended books

- Epidemiology in medical practice, 5th edition.
 Churchill Livingstone. New York, London and Tokyo
- Strikland

iv. Periodicals, Web sites, ... etc

• International Journal of epidemiology

v. others

Web sites:

WHO. World health Organization

Centers for Disease Control and Prevention

9. Signature

Course Coordinator		
Unit 1 Coordinator:	Head of the Department:	
Date:	Date:	
Unit 2 Coordinator:	Head of the Department:	
Date:	Date:	

Course 3 (Pathology) and Anatomy

Name of department: Tropical Medicine and Gastroenterology Faculty of medicine Assiut University 2022-2023

Course 3 unit 1 (Pathology)

1. Unit data

- 🖊 Unit Title: Pathology
- Unit code: GIT223C#
- Speciality is Tropical Medicine and Gastroenterology
- Number of Credit point: Didactic 1, (100%) practical 0 (0%), total 1 CP.
- Department (s) delivering the course: Pathology in conjunction with *Tropical Medicine and Gastroenterology*
- Coordinator (s): Staff members of Pathology Department in conjunction with *Tropical Medicine and Gastroenterology* Department as annually approved by both departments' councils
- Date last reviewed: May 2022
- Requirements (prerequisites) if any :
 - 📥 None

2. Unit aims

-The student should acquire the pathological facts necessary for *Tropical Medicine and Gastroenterology*

3. Intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
 A. Mention Principles of General Pathology of: Diagnostic cytology. Hepatosplenic Shistosomiasis Tuberculosis 	-Lectures	-Written and oral examination - Log book
 B-Describe Pathologic Details of: Typhoid fever Liver abscess Peptic ulcer Intestinal ulcer Acute viral hepatitis Chronic hepatitis Autoimmune hepatitis Liver cirrhosis Hepatocellular Carcinoma 		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of Pathology with clinical	Didactic	-Written
reasoning, diagnosis and management of common	(lectures,	and oral
diseases related to Tropical Medicine and	seminars,	examination
gastroenterology	tutorial)	-Log book

C- Practical skills = 0

D-General Skills Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A-Use information technology to manage information, access on-line medical information; and support their own education		Oral Exam Logbook

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in common condition mentioned in A.A and A.B	-Observation and supervision -Written and oral communication	Oral Exam Logbook Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles	Senior Staff Experience	Oral Exam Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery	-Observation	360o global
settings and systems.	-Senior staff	rating
	experience	

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First Part

Торіс	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
Principles of General Pathology of:				
- Diagnostic cytology.	А	А	-	A-D
 Hepatosplenic Shistosomiasis 	А	А	-	A-D
- Tuberculosis	A	А	-	A-D
Pathologic Details of:				
- Typhoid fever	В	А	-	A-D
- Liver abscess	В	А		A-D
- Peptic ulcer	В	A		A-D
- Intestinal ulcer	В	А		A-D
-Acute viral hepatitis	В	А	-	A-D
-Chronic hepatitis	В	А	-	A-D
- Autoimmune hepatitis	В	А	-	A-D
- Liver cirrhosis	В	A	-	A-D
-Hepatocellular carcinoma	В	А	-	A-D

5. Course Methods of teaching/learning:

- **1** Didactic (lectures, seminars, tutorial)
- 2 Observation and supervision
- 3 Written & oral communication
- 4 Senior staff experience

6. Course Methods of teaching/learning: for students with poor achievements

- 1. Extra Didactic (lectures, seminars, tutorial) according to their needs
- **2.** Extra Laboratory work according to their needs

7. Course assessment methods:

i. Assessment tools:

- **1.** Written and oral examination)
- 2. Log book
- ii. Time schedule: At the end of the first part
- iii. Marks: 50

8. List of references

- i. Lectures notes
- Course notes
- Staff members print out of lectures and/or CD copies
- ii. Essential books
- KUMAR, V., COTRAN, R.S., and ROBBINS, S.L. Robbins Basic Pathology. 7th ed. Saunders Publisher

iii. Recommended books

• Diseases of the liver and Biliary System (Sheila Sherlock and James Dooley)

iv. Periodicals, Web sites, ... etc

- Human pathology
- iv. Periodicals, Web sites, ... etc
 - American J of Gastroenterology
 - Gut
 - Hepatology
 - J of Infectious diseases
- v. others

None

Course 3 Unit (Module) 2 (Anatomy)

1. Unit data

- 4 Unit Title: Anatomy
- **4** Unit code: **GIT223C** #
- Speciality is Tropical Medicine and Gastroenterology
- Number of Credit point: Didactic 1, (100 %) practical 0 (0 %), total
 1 CP.
- Department (s) delivering the course: Anatomy in conjunction with Tropical Medicine and Gastroenterology
- Coordinator (s): Staff members of Anatomy Department in conjunction with Tropical Medicine and Gastroenterology annually approved by both departments councils
- **4** Date last reviewed: May 2022
- Requirements (prerequisites) if any :
- \rm 🖊 None

2. Course aims

-The student should acquire the facts of Anatomy necessary for Tropical Medicine and Gastroenterology.

3. Intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation	
A. Anatomic principles of Liver, biliary system, spleen and pancreas	-Lectures	-Written and oral examination - Log book	
 B-Anatomic principles of GIT Basic structure of the gastrointestinal system Individual components of the gastrointestinal system 	-Lectures	-Written and oral examination - Log book	
 1. Oesophagus 2. Stomach 3. Small intestine 4. Large intestine 			

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
 A. Correlates the facts of Anatomy with	 Didactic	Written and
clinical reasoning, diagnosis and	(lectures,	oral
management of common diseases related	seminars,	examination
to Tropical Medicine and Gastroenterology.	tutorial)	Log book

C-Practical skills = 0

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of Meth teaching/ Evalu learning	nods of nation
A. Use information technology to managed	ge Senior staff Oral	Exam
information, access on-line medic	al experience Logb	ook
information; and support their own education		

Interpersonal and communication skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in common condition mentioned		Oral Exam
in A.A and A.B	experience	Logbook
		Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles	Senior staff experience	Oral Exam Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery	Senior staff	360o global
settings and systems.	experience	rating

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First Part

Торіс	Covered ILOs			
	Knowledge	Intellectual	Practical	General
	Α	В	skill C	Skills D
A-Anatomic principles of Liver, biliary system, spleen and pancreas	A	В	-	A-D
B-Anatomic principles of GIT	А	A & B	-	A-D
 1. Oesophagus 2. Stomach 3. Small intestine 4.Large intestine 	A	A	-	A-D

5. Course Methods of teaching/learning:

- 1-Didactic (lectures, seminars, tutorial)
- 2-Written & oral communication
- 3-Senior staff experience

6. Course Methods of teaching/learning: for students with poor achievements

- Extra Didactic (lectures, seminars, tutorial) according to their needs
- 2. Extra Laboratory work according to their needs

7. Course assessment methods:

i. Assessment tools:

- 1- Written and oral examination
- 2- Log book
- ii. Time schedule: At the end of the first part
- iii. Marks: 50

8. List of references

i. Lectures notes

Course notes

• Staff members print out of lectures and/or CD copies

ii. Essential books

Gray's anatomy.

Clinical Anatomy for Medical Students, R.S. Snell

Diseases of the liver and Biliary System (Sheila Sherlock and James

Dooley)

iii. Recommended books

Last's Anatomy

Grant's Method of Anatomy

Grant's Atlas of Anatomy.

iv. Periodicals, Web sites, ... etc

journal of anatomy

9. Signature

Course Coordinator		
Unit 1 Coordinator: Head of the Department:		
Date:	Date:	
Unit 2 Coordinator:	Head of the Department:	
Date:	Date:	

Course 4 (Physiology)

Name of department: Tropical Medicine and Gastroenterology Faculty of medicine Assiut University 2022-2023

1. Course data

- Course Title: Physiology
- Course code: GIT206
- Speciality is Tropical Medicine and Gastroenterology
- Number of Credit point: Didactic 1, (100%) practical 0 (0%) total 1 CP.
- Department (s) delivering the course: Physiology in conjunction with Tropical Medicine and Gastroenterology
- Coordinator (s): Staff members of Physiology Department in conjunction with Tropical Medicine Department as annually approved by both departments councils
- **L** Date last reviewed: May 2022
- Requirements (prerequisites) if any :
 - **4** None

2. Course Aims

-The student should acquire the physiological Background necessary for Tropical Medicine in clinical reasoning, diagnosis and management of Tropical diseases.

3. Intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
 A. Mention Physiologic Principles of GIT and liver including: Physiologic Principles -GIT secretion and hormones -GIT motility -Digestion and absorption -Acid-base balance - Electrolytes -Bilirubin metabolism 	-Lectures	-Written and oral examination - Log book
 B. Describe Physiologic details of: Blood Physiology of swallowing and defecation Regulation of body temperature 		

B-Intellectual outcomes

ILOs	Methods of teaching/	Methods of Evaluation
A. Correlates the facts of Physiology with clinical reasoning, diagnosis and management of common diseases related to Tropical Medicine and gastroenterology	learning Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Tropical Medicine and gastroenterology.		

C- Practical skills = 0 D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A-Use information technology to manage	-Observation and	Oral Exam
information, access on-line medical	supervision	Logbook
information; and support their own education	-Written and oral	
	communication	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in common condition	-Observation and	Oral Exam
mentioned in A.A and A.B	supervision	Logbook
	-Written and oral	Check list
	communication	

Professionalism

ILOs			Methods of Evaluation
	learning		
C. Demonstrate a commitment to ethical	Senior	Staff	Oral Exam
principles	Experience		Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery	-Observation -Senior staff	•
settings and systems.	experience	Tatilig

Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First Part

Торіс	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
GIT secretion and hormones	А	A&B	-	A-D
-Digestion and absorption	А	A&B	-	A-D
-Acid base balance	А	A&B	-	A-D
- Electrolytes	А	A&B	-	A-D
-Autonomic nervous system	А	A&B	-	A-D
Blood	В	A&B	-	A-D
-Physiology of swallowing and defecation	В	A&B	-	A-D
-Regulation of body temperature	В	A&B	-	A-D

5. Course Methods of teaching/learning:

- 1. Didactic (lectures, seminars, tutorial)
- 2. Observation
- 3. Written & oral communication
- 4. Senior staff experience

6. Course Methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs

7. Course assessment methods:

i. Assessment tools:

- 1- Written and oral examination
- 2- Log book
- ii. Time schedule: At the end of the first part
- iii. Marks: 50

	8. List of references
i. Leo	ctures notes
•	Staff members print out of lectures and/or CD
	copies
•	Medical physiology books by Staff Members of the
	Department of Medical physiology -Assiut
	University.
ii. Es	sential books
•	Guyton AC, Hall JE: Textbook of Medical
I	Physiology, 11 th ed. Saunders, 2006.
iii. Reco	ommended books
•	Diseases of the liver and Biliary System (Sheila
	Sherlock and James Dooley)
iv. Po	eriodicals, Web sites, etc
•	Journal of applied physiology.
•	American J of Gastroenterology
	9. Signature

Course Coordinator		
Course Coordinator: Head of the Department:		
••••••	••••••	
Date:	Date:	

Course 5 Internal Medicine

Name of department: Tropical Medicine and Gastroenterology Faculty of medicine Assiut University 2022-2023

1. Course data

- **4** Course Title: Internal Medicine
- **4** Course code: GIT218
- Speciality is Tropical Medicine and Gastroenterology
- Number of Credit points: Didactic 5, (41.7%) practical 7
 (58.3 %), total 12.
- **Department (s) delivering the course: Internal Medicine**
- Coordinator (s): Staff members of Internal Medicine

Department as annually approved by department councils

- Date last reviewed: May 2022.
- Requirements (prerequisites) if any :
 - 📥 None

2. Course aims

-To make the students able to be familial with the diagnosis and management of common medical problems that may be encountered with Tropical medicine and gastroenterology.

- To make the students able to deal with medical emergencies safely and effectively as regard their investigation and management.

3. Intended learning outcomes (ILOs):

A-Knowledge and understanding			
ILOs	Methods of	Methods of	
	teaching/	Evaluation	
	learning		
 A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: 1- Cardiology a-Heart failure b- Rheumatic fever c-Infective endocarditis d- Hypertension e- Ischemic heart diseases and cardiomyopathy 2- Nephrology a-Renal failure b-Nephritis c- Nephrotic syndrome 3-Haematology a- Lymphomas b- Coagulation disorders d-Anemia e- Leukaemias 4-Neurological diseases a- Diabetic Neuropathy 5- Endocrinology a- Diabetes mellitus 	-Didactic (lectures, seminars, tutorial) -Case presentation	- Written and oral examination - Log book	

A-Knowledge and understanding

b- Thyroid diseases	
c- Adrenal gland diseases	
6-Collagen vascular and systemic diseases	
SLE and Rheumatoid arthritis	
B. Mention the principles of :	
Basics of general medicine	
C. State update and evidence based Knowledge of	
Hypertension	
Diabetes mellitus	
Coagulation disorders	
D. Memorize the facts and principles of the relevant	
basic supportive sciences related to Internal	
Medicine.	
E. Mention the basic ethical and medicolegal	
principles relevant to Internal Medicine.	
F. Mention the basics of quality assurance to ensure	
good clinical care in Internal Medicine.	
G. Mention the ethical and scientific principles of	
medical research.	
H. State the impact of common health problems in	
the field of Internal Medicine on the society.	

B-Intellectual outcomes

ILOs	Methods of teaching/	Methods of Evaluation
	learning	
A. Correlates the facts of relevant basic and	-Clinical	-Logbook and
clinically supportive sciences with clinical	rounds	Portfolios
reasoning, diagnosis and management of common	Senior staff	-Procedure and
diseases related to Internal Medicine.	experience	case
		presentation
B. Demonstrate an investigatory and analytic		
thinking (problem solving) approaches to common		
clinical situations related to Internal Medicine.		
C. Design and present cases , seminars in		
common problem		
D-Formulate management plans and alternative		
decisions in different situations in the field of the		
Internal Medicine.		

C-Practical skills (Patient Care)

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Obtain proper history and examine patients in	-Didactic;	-OSCE
caring and respectful behaviors.	-Lectures	-log book &
	-Clinical	portfolio
	rounds	-Clinical
	-Seminars	exam in
	-Clinical	internal
	rotations	medicine
	(service	
	teaching)	
B. Order the following non invasive/invasive	-Clinical	-Procedure
diagnostic procedures:	round with	presentation
-Routine appropriate Lab investigations	senior staff	- Log book
related to conditions mentioned in A.A	Observation	- Chick list
-ECG	-Post	
-Chest X-ray	graduate	
- ESR, blood culture.	teaching	
-Echocardiography.		
-Blood picture		
-Blood chemistry		
-Metabolic profile:[i.e. serum electrolytes]		
-Endocrinal profile		
Rheumatoid factor, ANF, LE cells.		
C. Interpret the following non invasive/invasive	Clinical	Procedure
diagnostic procedures	round with	presentation
-Routine appropriate Lab investigations	senior staff	- Log book
related to conditions mentioned in A.A		- Chick list
-ECG		
-Chest X-ray		
- ESR, blood culture.		

-Echocardiography. -Blood picture -Blood chemistry -Metabolic profile:[i.e. serum electrolytes] -Endocrinal profile Rheumatoid factor, ANF, LE cells.		
D. Perform the following non invasive/invasive Diagnostic and therapeutic procedures. -Urine testing for protein -ECG	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list
E. Prescribe the following non invasive/invasive therapeutic procedures : -Prescribe proper treatment for conditions mentioned in A.A	Clinical round with senior staff	- Log book - Chick list
F. Carry out patient management plans for common conditions related to Internal Medicine as in mentioned in A.A	Clinical round with senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to Internal Medicine.		
H-Provide health care services aimed at preventing health problems related to Internal Medicine.		
I-Provide patient-focused care in common conditions related to Internal Medicine, while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A.		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of	Methods of		
	teaching/	Evaluation		
	learning			
A. Perform practice-based improvement	-Case log	Procedure/case		
activities using a systematic	-Observation	presentation		
methodology(audit, logbook)	and supervision	-Log book and		
	-Written & oral	Portfolios		
	communication			
B. Appraises evidence from scientific	-Journal clubs			
studies(journal club)	- Discussions in			
	seminars and			
	clinical rounds			
C. Conduct epidemiological Studies and				
surveys.				
D. Perform data management including data				
entry and analysis.				
E. Facilitate learning of junior students and	Clinical rounds			
other health care professionals.	Senior staff			
	experience			

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Clinical round Seminars Lectures Case presentation	Global rating Procedure/case presentation Log book Portfolios Chick list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		

	1	
I. Work effectively with others as a member of a		
health care team or other professional group.		
J. Present a case in common problems related to	Clinical	Clinical Exam
Internal Medicine.	round	
	Seminars	
K. Write a report :	Senior staff	Chick list
ECG report.	experience	
L. Council patients and families about:	Clinical	
Conditions mentioned above in A.A.	round with	
	senior staff	

Professionalism

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
M. Demonstrate respect, compassion, and	Observation	1. Objective
integrity; a responsiveness to the needs of		
patients and society	experience	clinical
	Case taking	examination
		2. Patient survey
N. Demonstrate a commitment to ethical		1. 360o global
principles including provision or withholding of		rating
clinical care, confidentiality of patient		
information, informed consent, business		
practices		
O. Demonstrate sensitivity and responsiveness to		1. Objective
patients' culture, age, gender, and disabilities		structured
		clinical
		examination
		2. 360o global
		rating

Systems-Based Practice

ILOs	teaching/	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	learning Observation Senior staff experience	1. 360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		1. Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		1. 3600 global rating 2. Patient survey

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical	General
	Α	В	skill C	Skills D
1 Cardiology				
a-Heart failure	A	A-D	A-I	A-R
b-Rheumatic fever	A	A-D	A-I	A-R
c-Infective endocarditis	A	A-D	A-I	A-R
d-Hypertension	A & C	A-D	A-I	A-R
e- Ischemic heart diseases	A	A-D	A-I	A-R
and cardiomyopathy				
2 Nephrology				
a-Renal failure	A	A-D	A-I	A-R
b-Nephritis	A	A-D	A-I	A-R
c-Nephrotic syndrome	A	A-D	A-I	A-R
3 Haematology				
a- Lymphomas leukaemia	A	A-D	A-I	A-R
and				
b-Coagulation disorders	A & C	A-D	A-I	A-R
c-Anemia	A	A-D	A-I	A-R
4 Neurological diseases				
a- Diabetic Neuropathy	A	A-D	A-I	A-R
5 Endocrinology				
a-Diabetes mellitus	A	A-D	A-I	A-R
b-Thyroid diseases	A	A-D	A-I	A-R
c-Adrenal gland diseases	A	A-D	A-I	A-R
6- Collagen vascular and	A	A-D	A-I	A-R
systemic diseases as SLE and				
Rheumatoid arthritis				
Basics of Internal Medicine	В	А		-

5. Course Methods of teaching/learning:

- 1. Didactic ; Lectures
- 2. Clinical rounds
- **3.** Seminars
- **4.** Clinical rotations
- **5.** Service teaching
- 6. Post graduate teaching
- 7. Perform under supervision of senior staff
- 8. Case presentation
- 9. Written & oral communication
- 10. Observation

6. Course Methods of teaching/learning: for students with poor achievements

- 1. Extra Didactic (lectures, seminars, tutorial) according to their needs
- **2.** Extra Laboratory work according to their needs

7. Course assessment methods:

i. Assessment tools:

- 1. Clinical examination
- 2. Written and oral examination
- 3. Chick list
- 4. log book & portfolio
- 5. Procedure/case presentation
- 6. Objective structured clinical examination
- 7. Check list evaluation of live or recorded performance
- 8. Patient survey
- 9. 3600 global rating

ii. Time schedule: At the end of the first part

iii. Marks: 250

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

-Davidson of Internal medicine

iii. Recommended books

- Harrisson's Textbook of Medicine, McGraw Hill, 2005.

iv. Periodicals, , ... etc

Internal Medicine Journal

Journal of general Internal Medicine

Web sites: www.pubmed.com

9. Signature

Course Coordinator:	Head of the Department:
••••••	••••••
Date:	Date:

Course 6 Clinical Pathology

Name of department: Tropical Medicine and Gastroenterology Faculty of medicine Assiut University 2022-2023

1. Course data

- Course Title: Clinical pathology
- 4 Course code: GIT231
- Speciality is Tropical Medicine and Gastroenterology
- Number of Credit point: Didactic 1, (25%) practical 3 (75%) total 4 CP.
- Department (s) delivering the course: Clinical pathology in conjunction with Tropical Medicine and Gastroenterology
- Coordinator (s): Staff members of Clinical pathology
 Department in conjunction with Tropical Medicine
 Department as annually approved by both departments
 councils
- **L** Date last reviewed: May 2022
- Requirements (prerequisites) if any :
 - **4** None

2. Course Aims

-The student should acquire the facts of clinical pathology necessary for Tropical Medicine in clinical reasoning, diagnosis and management of Tropical diseases.

3. Intended learning outcomes (ILOs):

A-Knowledge and understanding

A-KIOWIEuge and understanding			
ILOs	Methods of teaching/ Learning	Methods of Evaluation	
 A. Mention Principles of: Venipuncture (technique, precaution and pre analytical errors) Urine analysis. Interpretation of bone marrow aspiration Blood component therapy and hazards of blood transfusion 	-Lectures	-Written and oral examination - Log book	
 B. Describe details of: Practical points and interpretations of ascitic fluid analysis. Practical points and interpretations of oral glucose tolerance test. Practical points and interpretations of liver Function. Practical points and interpretations of Hepatitis Markers. Practical points and interpretations of kidney functions. Practical points and interpretations of electrolytes. Peripheral hemogram and interpretation. Types of anemia. Interpretation of lipogram. Interpretation of a case of PUO. 			

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of clinical pathology with clinical reasoning, diagnosis and management of common diseases related to Tropical Medicine and gastroenterology	Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Tropical Medicine and gastroenterology.		

C- Practical skills

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	Lvaluation
 A. Master of basic skills in the Clinical Pathology related to tropical medicine and gastroenterology Specimens preparation and collection Venipuncture (technique, precaution and pre analytical errors Practical points of ascitic fluid analysis. Practical points of oral glucose tolerance test. Practical points of liver Function. Practical points of Hepatitis Markers. Practical points of kidney functions. Practical points of stool analysis. Practical points of stool analysis. Practical points of investigation for PUO. 	-Laboratory work	-Assessment of practical skills -Log book
 B. Use information technology to support decisions in common situations related to Clinical Pathology and tropical medicine and gastroenterology C. Examine Peripheral Hemogram and interpretation. 		

D- General Skills Practice-Based Learning and Improvement

ILOs	Methods of teaching/	Methods of Evaluation
		Lvaluation
	learning	
A. Perform data management including data	-Observation and	Log book
entry and analysis.	supervision	
	-Written and oral	
	communication	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.	-Observation and supervision -Written and oral communication	Log book
C. Write a report in common condition mentioned in A.A		

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation -Senior staff	0
	experience	

Systems-Based Practice

ILOs	Methods of teaching/ Learning	Methods of Evaluation
E. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff	U
	experience	

Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First Part

Topic	Covered ILOs			
•	Knowledge A	Intellectual B	Practical skill C	General Skills D
 Specimens collection 	А	A&B	A&B	A-E
 Venipuncture (technique, precaution and pre analytical errors) 	A	A&B	A&B	A-E
 Urine analysis. 	А	A&B	-	A-E
 Interpretation of bone marrow aspiration 	А	A&B	-	A-E
Blood component therapy and hazards of blood transfusion	A	A&B	A&B	A-E
 Practical points and interpretations of ascitic fluid analysis. 	В	A&B	A&B	A-E
 Practical points and interpretations of oral glucose tolerance test. 	В		A&B	
 Practical points and interpretations of liver Function. Practical points and interpretations of Hepatitis Markers. 	В		A&B	
 Practical points and interpretations of lipogram. 	В		A&B	
 Practical points and interpretations of stool analysis. 	В		A&B	
 Practical points and interpretations of kidney functions. 	В		A&B	
 Practical points and interpretations of electrolytes. 	В		A&B	
 Peripheral hemogram and interpretation. 	В		A-C	
Types of anemia. ■	В	A&B	A&B	A-E

5. Course Methods of teaching/learning:

- 1. Didactic (lectures, seminars, tutorial)
- 1. Observation
- 2. Written & oral communication
- 3. Senior staff experience

6. Course Methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs

7. Course assessment methods:

i. Assessment tools:

- Written and oral examination including assessment of practical skills
- 2- Log book
- **ii. Time schedule:** At the end of the first part
- iii. Marks: 50

8. List of references

i. Lectures notes

• Staff members print out of lectures and/or CD copies

ii. Essential books

Walker text book of clinical methods 2008

iii. Recommended books

- Tiuz text book of clinical chemistry. 2008
- Handbook of clinical biochemistry 2nd Edition. 2011

- Clinical chemistry of the gastrointestinal disorders:

Contemporary Practice in Clinical Chemistry 4th edition 2020.

iv. Periodicals, Web sites, ... etc

- American Journal of clinical Pathology
- Archieves of pathology and laboratory medicine.
- www.hopkinsmedicine.org

9. Signature

Course Coordinator		
Course Coordinator: Head of the Department:		
••••••		
Date:	Date:	

Second Part

Course 7 Principals of Tropical Medicine and Gastroenterology

Name of department: Tropical Medicine and Gastroenterology Faculty of medicine Assiut University 2022-2023

1. Course data

- Course Title: Principals of Tropical Medicine and Gastroenterology.
- Course code: GIT223D
- Speciality: Tropical Medicine and Gastroenterology.
 Number of Credit point: Didactic 24, (17.9 %) practical 134
 (14 during year 1 and 96 during year 2, 3 {82.1% %}) total
 134
- Department (s) delivering the course: Department of Tropical Medicine and Gastroenterology - Faculty of Medicine- Assiut University.
- **Coordinator (s)**:

Principal Coordinator : Pr. Dr /Abeer Sharaf- Eldinn Assistant coordinator (s) Pr. Dr. Haidi Karam-Allah Ramadan Pr. Dr /Zenab Gaber Mahran Date last reviewed: May 2022

General requirements (prerequisites) if any :None

Requirements from the students to achieve course ILOs are

clarified in the joining log book.

This course consists of 6 Units (Modules)

- 1. Unit (Module) Hepatology
- 2. Unit (Module) Gastroenterology
- 3. Unit (Module) Infectious Diseases
- 4. Unit (Module) Nutrition
- 5. Unit (Module) Hematology
- 6. Unit (Module) tropical emergencies

Unit Coordinator (s):

Unit	Principle Coordinator	Assistant coordinators
1) Unit (Module) 1	Assistant Prof. Dr. Zenab Gaber	Assistant Prof: Dr /
Gastroenterology		Haidi Karam-Allah
2) Unit (Module)2	Assistant Prof. Dr. Zenab Gaber	Assistant Prof: Dr /
Hepatology		Haidi Karam-Allah
3) Unit (Module) 3	Prof. Dr Abeer Sharaf	Assistant Prof: Dr /
Infectious Diseases		Haidi Karam-Allah
4) Unit (Module) 4	Assistant Prof. Dr Haidi karam-Allah	Assistant Prof: Dr /
Nutrition		Haidi Karam-Allah
	Assistant Prof. Dr Haidi	
5) Unit (Module) 5	Karam-Allah	Assistant Prof: Dr /
Hematology		Haidi Karam-Allah
6) Unit (Module) 6	Prof. Dr. Abeer Sharaf	Assistant Prof: Dr /
Tropical emergencies		Haidi Karam-Allah

2. Course aims

1. To enable candidates to Acquire satisfactory level of clinical skills, bedside care skills, in addition to update medical knowledge as well as clinical experience and competence in the area of Tropical Medicine and Gastroenterology and enabling the candidates of making appropriate referrals to a subspecialist.

2. Provide candidates with fundamental knowledge and skills of dealing with critically ill patients, with Gastrointestinal, hepatic and infectious diseases.

3- To improve knowledge of physiology about body temperature regulation and changes on exposure to cold and hot weather.

4-To demonstrate the ability to provide patient-centered care that is appropriate, compassionate, and effective for treatment of Tropical health problems and the promotion of health.

5-To give opportunities to evaluate and manage a broad variety of Gastrointestinal, hepatic and infectious diseases.

6-To learn candidates to develop skills for using diagnostic tools (as paracentesis , abdominal US, Liver biopsy, etc---).

3. Course intended learning outcomes (ILOs):

Unit 1 Hepatology

A-Knowledge and understanding

ILOs	Methods of teaching/	Methods of Evaluation
	learning	
 A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: Acute viral hepatitis (A,B.C,D,E) Chronic hepatitis Liver cirrhosis and its complications Liver cell failure Ascites NAFLD(Fatty liver and NASH and insulin resistance) Spontaneous Bacterial peritonitis Hepatic encephalopathy Hepatorenal syndrome Primary Malignant tumors Secondary Malignant tumors Liver abscesses Cholecystitis (Acute & chronic) Autoimmune hepatitis Fulminant Hepatitis Primary biliary cirrhosis Budd – chiari syndrome Metabolic liver diseases Alcoholic liver diseases Hepatopulmonary syndrome 	Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-OSCE at the end of each year -log book & portfolio - MCQ examination at the second year -Oral and written exam

- Drug induced liver disease	1
-Drug induced liver disease	
B. Mention the principles of :	
-Jaundice and Cholestasis – Liver transplantation	
- Liver diseases in pregnancy	
-Liver diseases in elderly	
- Liver in systemic diseases	
- Hepatosplenomegaly	
-Portal hypertension	
- Gall stones	
-Abdominal US (Diagnostic and Interventional)	
-Assessment of surgical risk in liver cirrhosis	
- liver and heart	
-Liver and kidney	
-Liver and lung	
-Antiviral drugs	
-Drugs used in liver disease.	
-Liver biopsy.	
C. State update and evidence based Knowledge of	
- Viral hepatitis	
- Hepatic encephalopathy	
-Autoimmune hepatitis	
-Fulminant Hepatitis	
-Liver cirrhosis and fibrosis	
-Ascites and Spontaneous bacterial peritonitis.	
-Hepatorenal syndrome.	
-Hepatopulmonary syndrome	
-NAFLD(Fatty liver and NASH and insulin resistance)	
-Guidelines in management of chronic hepatitis B	
and C).	
- Guidelines in management of Portal hypertension	
-Antiviral drugs	
-Liver Transplantation	
-Updates in Hepatology	
D. Memorize the facts and principles of the relevant	
basic and clinically supportive sciences related to	

Hepatology.	
E. Mention the basic ethical and medicolegal	
principles that should be applied in practice and are	
relevant to Hepatology.	
F. Mention the basics and standards of quality	
assurance to ensure good clinical practice in the field	
of Hepatology.	
G. Mention the ethical and scientific principles of med	
research methodology.	
H. State the impact of common health problems in	
the field of Hepatology on the society and how good	
clinical practices improve these problems.	

B-Intellectua	l outcomes	
ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Correlates the facts of relevant basic and	Clinical	Procedure/case
clinically supportive sciences with clinical	rounds	presentation
reasoning, diagnosis and management of common	Senior staff	Log book
diseases related to Hepatology.	experience	
B. Demonstrate an investigatory and analytic		
thinking (problem solving) approaches to common		
clinical situations related to Hepatology.		
C. Design and /or present a case or review		
(through seminars/journal clubs.) in one or more		
of common clinical problems relevant to the field		
of Hepatology.		
D-Formulate management plans and alternative		
decisions in different situations in the field of the		
Hepatology.		

• + .

C-Practical skills (Patient Care)

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Obtain proper history and examine patients in	-Didactic;	OSCE at the
caring and respectful behaviors.	-Lectures	end of each
	-Clinical	year
	rounds	-log book &
	-Seminars	portfolio
	-Clinical	- One MCQ
	rotations	examination
	(service	at the
	teaching)	second half
		of the
		second year
		and another
		one in the
B. Order the following non invasive/invasive	Clinical	third year -Procedure
B. Order the following non invasive/invasive diagnostic procedures	round with	presentation
-Routine appropriate Lab investigations	senior staff	- Log book
related to conditions mentioned in A.A	Observation	- Chick list
-X ray abdomen.	Post	ernek not
-Abdominal Ultrasonography	graduate	
-CT abdomen	teaching	
-liver function testing	Hand on	
-Upper and lower endoscopy.	workshops	
C. Interpret the following non invasive/invasive	Clinical	Procedure
diagnostic procedures	round with	presentation
-Routine appropriate Lab investigations	senior staff	- Log book
related to conditions mentioned in A.A		- Chick list
-Liver function tests.		
-X ray abdomen.		
-Abdominal Ultrasonography.		

 D. Perform the following non invasive/invasive Diagnostic and therapeutic procedures. -Urine testing for protein -Ascitic fluid aspiration -Abdominal US. -liver biopsy. 	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list
 E. Prescribe the following non invasive/invasive therapeutic procedures : -Prescribe proper treatment for conditions in A.A -Therapeutic paracentesis. 	Clinical round with senior staff	 Procedure presentation Log book Chick list
F. Carry out patient management plans for common conditions related to Hepatology.	Clinical round with senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to Hepatology.		
 H-Provide health care services aimed at preventing health problems related to Hepatology like: -Delayed diagnosis of infective and neoplastic liver diseases. -Hospital acquired infections. - Hepatic encephalopathy. -Variceal Bleeding. 		
I-Provide patient-focused care in common conditions related to Hepatology, while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A.		
J. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records).		

D-General Skills Practice-Based Learning and Improvement

	-	
ILOs	Methods of	
	teaching/	Evaluation
	learning	
A. Perform practice-based improvement	-Case log	Procedure/case
activities using a systematic methodology (share	-Observation	presentation
in audit and risk management activities and use	and	-Log book and
logbook).	supervision	Portfolios
	-Written & oral	
	communication	
B. Appraises evidence from scientific	-Journal clubs	
studies(journal club)	- Discussions in	
	seminars and	
	clinical rounds	
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data		
entry and analysis using information technology		
to manage information, access on-line medical		
information; and support their own education.		
E. Facilitate learning of junior students and other	Clinical rounds	
health care professionals including their	Senior staff	
evaluation and assessment.	experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	learning Simulations Clinical round Seminars Lectures Case presentation Hand on workshops	Global rating Procedure/case presentation Log book Portfolios Chick list and
 G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills. H. Provide information using effective nonverbal, explanatory, questioning, and writing skills. 		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in common problems related to Hepatology.	Clinical round Seminars	Clinical Exam
K. Write a report : -Patients medical report -Abdominal ultrasonography report, Interventional procedure report -Death report	Senior staff experience	Chick list
L. Council patients and families about: -Viral hepatitis -Transmission of hepatitis C and B -Screening of hepatic tumors	Clinical round with senior staff	

Professionalism

FIUIESSIUIIdIISIII		
ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	Observation Senior staff experience Case taking	 Objective structured clinical examination Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		1. 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		 Objective structured clinical examination 3600 global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems including good administrative and time management.	Observation Senior staff experience	1.360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		 Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		 3600 global rating Patient survey

Unit 2 Gastroenterology

A-Knowledge and understanding

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Describe the etiology, clinical picture, diagnosis	Didactic;	-OSCE at
and management of the following diseases and	-Lectures	the end of
clinical conditions:	-Clinical	each year
Common:	rounds	-log book &
-GERD	-Seminars	portfolio
-Oesophageal tumors	-Clinical	- MCQ
-Gastritis	rotations	examination
- Non ulcer dyspepsia	(service	at the
- Peptic ulcer	teaching)	second year
-Irritable bowel syndrome		-Oral and
-Intestinal tuberculosis		written
-Tuberculous peritonitis		exam
Less common		
-Gastroparesis		
-Zollinger Ellison syndrome		
-Gastric tumors		
-Intestinal obstruction		
-Intestinal pseudo-obstruction		
-Celiac disease		
-Tropical spru		
-Whipple's disease		
-Pseudomemberanous colitis		
-Crohn's disease		
-Ulcerative colitis		
-Diverticular disease of the colon		
-Small bowel tumors		
-Colonic tumors and screening of colorectal cancer.		
-Haemorrhoids		

	1	
-Acute pancreatitis		
-Chronic pancreatitis		
-Carcinoma of the pancreas		
-Endocrinal tumors of the pancreas		
B. Mention the principles of :		
Common		
- Gastrointestinal bleeding		
-Vomiting		
-Dysphagia		
-Abdominal pain		
-Diarrhea (Acute and chronic)		
-Constipation		
-Dysentery (Acute, chronic)		
Less common		
-Caustic injury		
– foreign body		
-Motility disorder		
-Intestinal parasites		
-Intestinal ischemia		
-Vascular malformation of the GIT		
-Gastrointestinal polyposis		
- Malabsorption		
-Protein losing enteropathy		
-Drug induced damage of the Gastrointestinal tract		
-Drugs for peptic ulcers		
-Drugs for GIT bleeding		
-Endoscopy in Gastrointestinal tract.		
-Radiology in Gastrointestinal tract.		
C. State update and evidence based Knowledge of		
-Guidelines in management of Gastrointestinal		
Bleeding.		
- Guidelines in management of Peptic ulcer.		
-Guidelines in management of inflammatory bowel		
diseases(Crohn's disease and Ulcerative colitis)		
-Management of acute and chronic pancreatitis.		

-Irritable bowel syndrome	
D. Memorize the facts and principles of the relevant	
basic and clinically supportive sciences related to	
Gastroenterology.	
E. Mention the basic ethical and medicolegal	
principles that should be applied in practice and are	
relevant to Gastroenterology.	
F. Mention the basics and standards of quality	
assurance to ensure good clinical practice in the field	
of Gastroenterology.	
G. Mention the ethical and scientific principles of med	
research methodology.	
H. State the impact of common health problems in the	
of Hepatology on the society and how good clinical pr	
improve these problems.	

B-Intellectual outcomes

	i outcomes	
ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Correlates the facts of relevant basic and	Clinical	Procedure/case
clinically supportive sciences with clinical	rounds	presentation
reasoning, diagnosis and management of common	Senior staff	Log book
diseases related to Gastroenterology.	experience	
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Gastroenterology.		
C. Design and /or present a case or review (through seminars/journal clubs.) in one or more of common clinical problems relevant to the field of Gastroenterology.		
D-Formulate management plans and alternative decisions in different situations in the field of the Gastroenterology.		

C-Practical skills (Patient Care)

C-Flactical Skins (Fatient Care)		
ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Obtain proper history and examine patients in	-Didactic;	OSCE at the
caring and respectful behaviors.	-Lectures	end of each
	-Clinical	year
	rounds	-log book &
	-Seminars	portfolio
	-Clinical	- One MCQ
	rotations	examination
	(service	at the
	teaching)	second half
		of the
		second year
		and another
		one in the
		third year
B. Order the following non invasive/invasive	Clinical	-Procedure
diagnostic procedures	round with	presentation
-Routine appropriate Lab investigations	senior staff	- Log book
related to conditions mentioned in A.A	Observation	- Chick list
-X ray abdomen.	Post	
-Abdominal Ultrasonography	graduate	
-CT abdomen	teaching	
-Upper and lower endoscopy.	Hand on	
	workshops	
C. Interpret the following non invasive/invasive	Clinical	Procedure
diagnostic procedures	round with	presentation
-Routine appropriate Lab investigations	senior staff	- Log book
related to conditions mentioned in A.A		- Chick list
-X ray abdomen.		
-Abdominal Ultrasonography.		
	•	

 D. Perform the following non invasive/invasive Diagnostic and therapeutic procedures. Blood sugar testing. Ryle's tube insertion Sengestaken tube insertion Tapping of Ascitic fluid Application of urinary catheter. Application of Intravenous cannula. 	Clinical round with senior staff -Perform under supervision of senior staff	- Log book - Chick list
 E. Prescribe the following non invasive/invasive therapeutic procedures : -Prescribe proper treatment for conditions mentioned in A.A -Use of Ryle's tube and rectal tube and Sungestaken tube. -Urinary catheter. 	Clinical round with senior staff	 Procedure presentation Log book Chick list
F. Carry out patient management plans for common conditions related to Gastroenterology.	Clinical round with senior staff	
 G. Use information technology to support patient care decisions and patient education in common clinical situations related to Gastroenterology. H-Provide health care services aimed at preventing health problems related to Gastroenterology like: 		
 -Delayed diagnosis of inflammatory and neoplastic Gastrointestinal diseases. - Complication of Peptic ulcer. -Complications of inflammatory bowel diseases. 		
 -Complications of pancreatitis. I-Provide patient-focused care in common conditions related to Gastroenterology, while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A. 		
J-Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records).		

D-General Skills Practice-Based Learning and Improvement

	•	
ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Perform practice-based improvement	-Case log	Procedure/case
activities using a systematic methodology (share	-Observation	presentation
in audit and risk management activities and use	and	-Log book and
logbook).	supervision	Portfolios
	-Written & oral	
	communication	
B. Appraises evidence from scientific	-Journal clubs	
studies(journal club)	- Discussions in	
	seminars and	
	clinical rounds	
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data		
entry and analysis using information technology		
to manage information, access on-line medical		
information; and support their own education.		
E. Facilitate learning of junior students and	Clinical rounds	
other health care professionals including their	Senior staff	
evaluation and assessment.	experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Simulations Clinical round Seminars Lectures Case presentation Hand on workshops	Global rating Procedure/case presentation Log book Portfolios Chick list and
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in common problems related to Gastroenterology.	Clinical round Seminars	Clinical Exam
K. Write a report : -Patients medical report -Abdominal ultrasonography report -Death report	Senior staff experience	Chick list
L. Council patients and families about: -Inflammatory bowel diseases. -Irritable bowel syndrome. -Screening of colorectal cancer. -Risk factors and complications of peptic ulcer. -Gastrointestinal polyposis. -Diet in Celiac disease.	Clinical round with senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	Observation Senior staff experience Case taking	 Objective structured clinical examination Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		1. 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		 Objective structured clinical examination 3600 global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems including good administrative and time management.	Observation Senior staff experience	1. 360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		1. Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		1. 3600 global rating 2. Patient survey

Unit (Module) 3 Infectious Diseases		
A-Knowledge and unders	tanding	
ILOs	Methods of	,
	teaching/	Evaluation
A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: <u>Bacterial infections</u> Typhoid fever Salmonella infection other than typhoid Shigellosis Campylobacter enteritis Brucellosis E coli Cholera Legionellosis Haemophilus species Mycobacteria Spirochetal disease Other bacteria as: Anthrax Pseudomonas Yersinia infection Cat scratch disease Clostridial disease Anaerobic infection Leptospirosis Relapsing fever Ricketsial disease Infectious diarrhea Entero-colitides	learning Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-OSCE at the end of each year -log book & portfolio - MCQ examination at the second year -Oral and written exam

Food poisoning	
Pseudo membranous colitis	
Tuberculosis	
H. pylori infection	
Pneumonia	
Rheumatic Fever	
Infective Endocarditis	
Staphylococcal Infections	
Streptococcal infection	
Bacterial Meningitis	
Meningococcal Infections	
Leptospirosis	
Liver abscess	
<u>Viral diseases</u>	
Exanthems and Mumps	
Measles	
Rubella	
Varicella	
Mumps	
Herps simplex virus infection	
HIV infection	
Infectious mononucleosis	
Cytomegalovirus	
Enteroviruses	
Viral gastroenteritis	
Influenza and Updates	
Severe Acute Respiratory Syndrome (SARS)	
Hemorrhagic fever viruses	
COVID-19	
Parasitic disease	
- Trematode infection	
Schistosomiasis	
Liver, intestinal and lung fluke infection	
- Cestode infection	

Echinococcosis Taeniasis/Cysticercosis Hymenolepiasis Diphyllobothriasis - Nematode infection Ascariasis Enterobiasis Strongyloidiasis Trichrinosis (Trichinella spiralis) Trichuriasis (Trichinella spiralis) Trichuriasis (Trichinella spiralis) Trichuriasis (Trichinella spiralis) Intestinal Capillariasis (Capillaria philippinensis), Capillaria hepatica Visceral larva migrans/Toxocariasis hookworm Filariasis - Protozoon disease Amebiasis Giardiasis Parasitic disease of the liver Malaria and Babesiosis Leishmaniasis Toxoplasmosis Cryptosporidiosis Pneumocystis jiroveci (carini) pneumonia Emerging infectious diseases B. Mention the principles of : -Pyrexia of unknown origin (PUO) -Fever with jaundice Fever with sore throat Fever with sore throat Fever with sore throat Fever with hepatomegaly Fever with hepatomegaly Fever with hepatomegaly Fever with hymphadenopathy Fever with lymphadenopathy Fever with lymphadenopathy		
HymenolepiasisDiphyllobothriasis- Nematode infectionAscariasisEnterobiasisStrongyloidiasisTrichinosis (Trichinella spiralis)Trichinosis (Trichuris trichiura)Intestinal Capillariasis (Capillaria philippinensis),Capillaria hepaticaVisceral larva migrans/ToxocariasishookwormFilariasis- Protozoon diseaseAmebiasisGiardiasisParasitic disease of the liverMalaria and BabesiosisLeishmaniasisToxoplasmosisCryptosporidiosisPneumocystis jiroveci (carini) pneumoniaEmerging infectious diseasesB. Mention the principles of :-Pyrexia of unknown origin(PUO)-Fever with sore throatFever with splenomegalyFever with hepatomegalyFever with lippnhadenopathy		
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StrongyloidiasisTrichinosis (Trichinella spiralis)Trichuriasis (Trichuris trichiura)Intestinal Capillariasis (Capillaria philippinensis),Capillaria hepaticaVisceral larva migrans/ToxocariasishookwormFilariasis- Protozoon diseaseAmebiasisGiardiasisParasitic disease of the liverMalaria and BabesiosisLeishmaniasisToxoplasmosisCryptosporidiosisPneumocystis jiroveci (carini) pneumoniaEmerging infectious diseasesB. Mention the principles of :-Pyrexia of unknown origin (PUO)-Fever with jaundiceFever with splenomegalyFever with hepatomegalyFever with hepatomegalyFever with lymphadenopathy	Ascariasis	
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Trichuriasis (Trichuris trichiura)Intestinal Capillariasis (Capillaria philippinensis),Capillaria hepaticaVisceral larva migrans/ToxocariasishookwormFilariasis- Protozoon diseaseAmebiasisGiardiasisParasitic disease of the liverMalaria and BabesiosisLeishmaniasisToxoplasmosisCryptosporidiosisPneumocystis jiroveci (carini) pneumoniaEmerging infectious diseasesB. Mention the principles of :-Pyrexia of unknown origin(PUO)-Fever with jaundiceFever with rigorsFever with splenomegalyFever with hepatomegalyFever with lymphadenopathy	Strongyloidiasis	
Intestinal Capillariasis (Capillaria philippinensis), Capillaria hepatica Visceral larva migrans/Toxocariasis hookworm Filariasis - Protozoon disease Amebiasis Giardiasis Parasitic disease of the liver Malaria and Babesiosis Leishmaniasis Toxoplasmosis Cryptosporidiosis Pneumocystis jiroveci (carini) pneumonia Emerging infectious diseases B. Mention the principles of : -Pyrexia of unknown origin(PUO) -Fever with jaundice Fever with sore throat Fever with sore throat Fever with sore throat Fever with splenomegaly Fever with hepatomegaly Fever with lymphadenopathy	Trichinosis (Trichinella spiralis)	
Capillaria hepatica Visceral larva migrans/Toxocariasis hookworm Filariasis - Protozoon disease Amebiasis Giardiasis Parasitic disease of the liver Malaria and Babesiosis Leishmaniasis Toxoplasmosis Cryptosporidiosis Pneumocystis jiroveci (carini) pneumonia Emerging infectious diseases B. Mention the principles of : -Pyrexia of unknown origin(PUO) -Fever with jaundice Fever with sore throat Fever with sore throat Fever with splenomegaly Fever with hepatomegaly Fever with hepatomegaly Fever with lymphadenopathy	Trichuriasis (Trichuris trichiura)	
Visceral larva migrans/Toxocariasis hookworm Filariasis - Protozoon disease Amebiasis Giardiasis Parasitic disease of the liver Malaria and Babesiosis Leishmaniasis Toxoplasmosis Cryptosporidiosis Pneumocystis jiroveci (carini) pneumonia Emerging infectious diseases B. Mention the principles of : -Pyrexia of unknown origin(PUO) -Fever with jaundice Fever with sore throat Fever with sore throat Fever with splenomegaly Fever with hepatomegaly Fever with hepatomegaly Fever with lymphadenopathy	Intestinal Capillariasis (Capillaria philippinensis),	
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Filariasis - Protozoon disease Amebiasis Giardiasis Parasitic disease of the liver Malaria and Babesiosis Leishmaniasis Toxoplasmosis Cryptosporidiosis Pneumocystis jiroveci (carini) pneumonia Emerging infectious diseases B. Mention the principles of : -Pyrexia of unknown origin(PUO) -Fever with jaundice Fever with sore throat Fever with splenomegaly Fever with hepatomegaly Fever with lymphadenopathy	Visceral larva migrans/Toxocariasis	
 Protozoon disease Amebiasis Giardiasis Parasitic disease of the liver Malaria and Babesiosis Leishmaniasis Toxoplasmosis Cryptosporidiosis Pneumocystis jiroveci (carini) pneumonia Emerging infectious diseases B. Mention the principles of : -Pyrexia of unknown origin(PUO) -Fever with jaundice Fever with sore throat Fever with splenomegaly Fever with hepatomegaly Fever with lymphadenopathy 	hookworm	
AmebiasisGiardiasisParasitic disease of the liverMalaria and BabesiosisLeishmaniasisToxoplasmosisCryptosporidiosisPneumocystis jiroveci (carini) pneumoniaEmerging infectious diseasesB. Mention the principles of :-Pyrexia of unknown origin(PUO)-Fever with jaundiceFever with sore throatFever with splenomegalyFever with hepatomegalyFever with lymphadenopathy	Filariasis	
GiardiasisParasitic disease of the liverMalaria and BabesiosisLeishmaniasisToxoplasmosisCryptosporidiosisPneumocystis jiroveci (carini) pneumoniaEmerging infectious diseasesB. Mention the principles of :-Pyrexia of unknown origin(PUO)-Fever with jaundiceFever with sore throatFever with splenomegalyFever with hepatomegalyFever with lymphadenopathy	- Protozoon disease	
Parasitic disease of the liverMalaria and BabesiosisLeishmaniasisToxoplasmosisCryptosporidiosisPneumocystis jiroveci (carini) pneumoniaEmerging infectious diseasesB. Mention the principles of :-Pyrexia of unknown origin(PUO)-Fever with jaundiceFever with sore throatFever with splenomegalyFever with hepatomegalyFever with lymphadenopathy	Amebiasis	
Malaria and BabesiosisLeishmaniasisToxoplasmosisCryptosporidiosisPneumocystis jiroveci (carini) pneumoniaEmerging infectious diseasesB. Mention the principles of :-Pyrexia of unknown origin(PUO)-Fever with jaundiceFever with sore throatFever with rigorsFever with splenomegalyFever with lymphadenopathy	Giardiasis	
LeishmaniasisToxoplasmosisCryptosporidiosisPneumocystis jiroveci (carini) pneumoniaEmerging infectious diseasesB. Mention the principles of :-Pyrexia of unknown origin(PUO)-Fever with jaundiceFever with sore throatFever with rigorsFever with splenomegalyFever with hepatomegalyFever with lymphadenopathy	Parasitic disease of the liver	
ToxoplasmosisCryptosporidiosisPneumocystis jiroveci (carini) pneumoniaEmerging infectious diseasesB. Mention the principles of :-Pyrexia of unknown origin(PUO)-Fever with jaundiceFever with sore throatFever with rigorsFever with splenomegalyFever with hepatomegalyFever with lymphadenopathy	Malaria and Babesiosis	
Cryptosporidiosis Pneumocystis jiroveci (carini) pneumonia Emerging infectious diseases B. Mention the principles of : -Pyrexia of unknown origin(PUO) -Fever with jaundice Fever with sore throat Fever with sore throat Fever with rigors Fever with splenomegaly Fever with hepatomegaly Fever with lymphadenopathy	Leishmaniasis	
Pneumocystis jiroveci (carini) pneumonia Emerging infectious diseasesB. Mention the principles of : -Pyrexia of unknown origin(PUO) -Fever with jaundice Fever with sore throat Fever with rigors Fever with splenomegaly Fever with hepatomegaly Fever with lymphadenopathy	Toxoplasmosis	
Emerging infectious diseasesB. Mention the principles of :-Pyrexia of unknown origin(PUO)-Fever with jaundiceFever with sore throatFever with rigorsFever with splenomegalyFever with hepatomegalyFever with lymphadenopathy	Cryptosporidiosis	
B. Mention the principles of : -Pyrexia of unknown origin(PUO) -Fever with jaundice Fever with sore throat Fever with rigors Fever with splenomegaly Fever with hepatomegaly Fever with lymphadenopathy	Pneumocystis jiroveci (carini) pneumonia	
-Pyrexia of unknown origin(PUO) -Fever with jaundice Fever with sore throat Fever with rigors Fever with splenomegaly Fever with hepatomegaly Fever with lymphadenopathy	Emerging infectious diseases	
-Fever with jaundice Fever with sore throat Fever with rigors Fever with splenomegaly Fever with hepatomegaly Fever with lymphadenopathy	B. Mention the principles of :	
Fever with sore throat Fever with rigors Fever with splenomegaly Fever with hepatomegaly Fever with lymphadenopathy	-Pyrexia of unknown origin(PUO)	
Fever with sore throatFever with rigorsFever with splenomegalyFever with hepatomegalyFever with hepatomegalyFever with lymphadenopathy	-Fever with jaundice	
Fever with rigors Fever with splenomegaly Fever with hepatomegaly Fever with lymphadenopathy	-	
Fever with splenomegaly Fever with hepatomegaly Fever with lymphadenopathy	Fever with rigors	
Fever with hepatomegaly Fever with lymphadenopathy		
Fever with lymphadenopathy		

-Hospital acquired infection	
-Traveler diarrhea	
-Viral like agents	
-Fungal diseases	
 Zoonoses Sexually transmitted diseases Gonorrhea Chlamydia infection 	
Viral infection including HIV	
-Pathogenesis of pyrexia	
-Regulation of body temperature	
 -Heat introduced disorders - Antimicrobial Chemotherapy and their principals of use. -Antiparasitic Chemotherapy -Chemoprophylaxis - Antimicrobial resistance -Antiviral drugs Antifungal drugs C. State update and evidence based Knowledge of Typhoid fever Shigellosis 	
Brucellosis Infectious diarrhea Pseudo membranous colitis Tuberculosis Pneumonia Meningococcal Infections Liver abscess HIV infection Influenza	

Severe Acute Respiratory Syndrome (SARS)	
D. Memorize the facts and principles of the relevant	
basic and clinically supportive sciences related to	
Infectious Diseases.	
E. Mention the basic ethical and medicolegal	
principles that should be applied in practice and are	
relevant to Infectious Diseases.	
F. Mention the basics and standards of quality	
assurance to ensure good clinical practice in the field	
of Infectious Diseases .	
G. Mention the ethical and scientific principles of med	
research methodology.	
H. State the impact of common health problems in the	
of Hepatology on the society and how good clinical pra	
improve these problems.	

B-Intellectual outcomes

D-Intellectual outcomes		
ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Correlates the facts of relevant basic and	Clinical	Procedure/case
clinically supportive sciences with clinical	rounds	presentation
reasoning, diagnosis and management of common	Senior staff	Log book
diseases related to Infectious Diseases .	experience	
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common		
clinical situations related to Infectious Diseases .		
C. Design and /or present a case or review		
(through seminars/journal clubs.) in one or more		
of common clinical problems relevant to the field		
of Infectious Diseases		
D-Formulate management plans and alternative		
decisions in different situations in the field of the		
Infectious Diseases .		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	OSCE at the end of each year -log book & portfolio - One MCQ examination at the second half of the second year and another one in the third year
 B. Order the following non invasive/invasive diagnostic procedures Routine appropriate Laboratory investigations related to conditions mentioned in A.A as -Chest x-ray -Urine analysis -Stool analysis -CBC, Blood film -Liver function tests -X ray abdomen - Abdominal Ultrasonography -CT abdomen - Upper and lower endoscopies - Echo 	Clinical round with senior staff Observation Post graduate teaching Hand on workshops	-Procedure presentation - Log book - Chick list

 C. Interpret the following non invasive/invasive diagnostic procedures -Routine appropriate Lab investigations related to conditions mentioned in A.A -X ray abdomen. -Abdominal Ultrasonography. 	Clinical round with senior staff	-Procedure presentation - Log book - Chick list
 D. Perform the following non invasive/invasive Diagnostic and therapeutic procedures. -Ascitic fluid aspiration -Pleural fluid aspiration -Abdominal US under supervision -Liver biopsy under supervision 	Clinical round with senior staff -Perform under supervision of senior staff	-Procedure presentation - Log book - Chick list
 E. Prescribe the following non invasive/invasive therapeutic procedures: -Prescribe proper treatment for conditions mentioned in A.A -Therapeutic ascitic fluid aspiration -Therapeutic Pleural fluid aspiration -Application of Intravenous cannula. 	Clinical round with senior staff	 Procedure presentation Log book Chick list
F. Carry out patient management plans for common conditions related to Infectious Diseases.	Clinical round with senior staff	
 G. Use information technology to support patient care decisions and patient education in common clinical situations related to Infectious Diseases. H-Provide health care services aimed at preventing health problems related to Gastroenterology like: Delayed diagnosis of infectious liver and GIT diseases Hospital acquired infections. -Complication of diarrhea 		

I-Provide patient-focused care in common conditions related to Infectious Diseases , while working with health care professionals, including those from other	
disciplines like:	
Conditions mentioned in A.A.	
J-Write competently all forms of patient charts and	
sheets including reports evaluating these charts and	
sheets (Write a consultation note, Inform patients of a	
diagnosis and therapeutic plan, completing and	
maintaining medical records).	

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of	
	teaching/	Evaluation
	learning	
A. Perform practice-based improvement	-Case log	Procedure/case
activities using a systematic methodology (share	-Observation	presentation
in audit and risk management activities and use	and	-Log book and
logbook).	supervision	Portfolios
	-Written & oral	
	communication	
B. Appraises evidence from scientific	-Journal clubs	
studies(journal club)	- Discussions in	
	seminars and	
	clinical rounds	
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data		
entry and analysis using information technology		
to manage information, access on-line medical		
information; and support their own education.		
E. Facilitate learning of junior students and	Clinical rounds	
other health care professionals including their	Senior staff	
evaluation and assessment.	experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Simulations Clinical round Seminars Lectures Case presentation Hand on workshops	Global rating Procedure/case presentation Log book Portfolios Chick list and
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in common problems related to Infectious Diseases.	Clinical round Seminars	Clinical Exam
K. Write a report : -Patients medical report -Abdominal Ultrasonography report - Discharge report -Death report	Senior staff experience	Chick list
L. Council patients and families about: -Conditions mentioned IN A.A	Clinical round with senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society		 Objective structured clinical examination Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		1. 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		 Objective structured clinical examination 3600 global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems including good administrative and time management.	Observation Senior staff experience	1. 360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		 Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		1. 360o global rating 2. Patient survey

Unit (Module) 4 Nutrition

A-Knowledge and understanding

ILOs		Methods of	
	teaching/	Evaluation	
	learning		
A. Describe the etiology, clinical picture, diagnosis and	Didactic;	-log book	
management of the following diseases and clinical	Lectures	- one MCQ	
conditions:	Clinical	examination	
-Water-soluble vitamins deficiency	rounds	at the second	
-Fat-soluble vitamins deficiency		year -Oral and	
The soluble vitamins denote by		written exam	
		whitten exam	
B. Mention the principles of:			
-Assessment of Malnutrition			
-Nutrition in liver diseases			
-Nutrition in celiac disease.			
- Obesity			
C. State update and evidence based Knowledge of			
-Malnutrition			
- Nutrition in liver diseases			
D. Memorize the facts and principles of the relevant			
basic and clinically supportive sciences related to			
Nutrition.			
E. Mention the basic ethical and medicolegal principles			
that should be applied in practice and are relevant to			
Nutrition.			
F. Mention the basics and standards of quality			
assurance to ensure good clinical practice in the field			
of Nutrition.			
G. Mention the ethical and scientific principles of medica			
research methodology.			
H. State the impact of common health problems in the fi			
Hepatology on the society and how good clinical practice			
improve these problems.			

B-Intellectual outcomes

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Correlates the facts of relevant basic and	Clinical	Procedure/case
clinically supportive sciences with clinical	rounds	presentation
reasoning, diagnosis and management of common	Senior staff	Log book
diseases related to malnutrition.	experience	
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common		
clinical situations related to malnutrition.		
C. Design and /or present a case or review		
(through seminars/journal clubs.) in one or		
more of common clinical problems relevant to		
the field of Nutrition.		
D-Formulate management plans and alternative		
decisions in different situations in the field of the		
Nutrition .		

C-Practical skills (Patient Care)

	cicit curcy	
ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Obtain proper history and examine patients in	-Didactic;	-log book
caring and respectful behaviors.	-Lectures	- One MCQ
	-Clinical	examination
	rounds	at the
	-Seminars	second half
	-Clinical	of the
	rotations	second year
	(service	
	teaching)	
B. Order the following non invasive/invasive	-Clinical	- Log book
diagnostic procedures	round with	- Chick list

 -Routine appropriate Laboratory investigations related to conditions mentioned in A.A . -Urine and stool analysis -Liver function testing -Ultrasonography -CT abdomen -Upper and lower endoscopies 	senior staff Observation Post graduate teaching	
 C. Interpret the following non invasive/invasive diagnostic procedures Routine appropriate Lab investigations related to conditions mentioned in A.A Liver function tests Results of Urine and stool analysis Abdominal Ultrasonography. Upper and lower endoscopies 	Clinical round with senior staff	-Procedure presentation - Log book - Chick list
 D. Perform the following non invasive/invasive diagnostic and therapeutic procedures. Blood sugar estimation Urinalysis Application of intravenous cannula. Abdominal US under supervision. Fixation of naso-gastric tube fixation of sngstaken tube 	Clinical round with senior staff -Perform under supervision of senior staff	-Procedure presentation - Log book - Chick list
 E. Prescribe the following non invasive/invasive therapeutic procedures: -Prescribe proper treatment for conditions mentioned in A.A 	Clinical round with senior staff	 Procedure presentation Log book Chick list
F. Carry out patient management plans for common conditions related to Nutrition .	Clinical round with senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to Nutrition .		

H-Provide health care services aimed at preventing health problems related to Nutrition like: -Malnutrition in liver disease	
I-Provide patient-focused care in common conditions related to Nutrition, while working with health care professionals, including those from other disciplines like:Conditions mentioned in A.A.	
J-Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records).	

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Perform practice-based improvement	-Case log	Procedure/case
activities using a systematic methodology (share	-Observation	presentation
in audit and risk management activities and use	and	-Log book and
logbook).	supervision	Portfolios
	-Written & oral	
	communication	
B. Appraises evidence from scientific	-Journal clubs	
studies(journal club)	- Discussions in	
	seminars and	
	clinical rounds	
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data		
entry and analysis using information technology		
to manage information, access on-line medical		
information; and support their own education.		
E. Facilitate learning of junior students and	Clinical rounds	
other health care professionals including their	Senior staff	
evaluation and assessment.	experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Simulations Clinical round Seminars Lectures Case presentation	Global rating Procedure/case presentation Log book and Portfolios Chick list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in common problems related to Nutrition.	Clinical round Seminars	Clinical Exam
 K. Write a report : -Patients medical report -Abdominal Ultrasonography report - Discharge report -Death report 	Senior staff experience	Chick list
L. Council patients and families about: -Malnutrition -Nutrition in celiac disease.	Clinical round with senior staff	

Professionalism

FIORESSIONALISH		
ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	Observation Senior staff experience Case taking	 Objective structured clinical examination Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		1. 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		 Objective structured clinical examination 3600 global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems including good administrative and time management.	Observation Senior staff experience	1. 360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		1. Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		1. 3600 global rating 2. Patient survey

Unit (Module) 5 Hematology

A-Knowledge and understanding

	Methods of teaching/ learning	Evaluation
 A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: -Anemias in tropics -Myloproliferative and lymphoproliferative disorders. 	Didactic; Lectures Seminars	-OSCE at the end of each year -log book & portfolio - one MCQ examination at the second year -Oral and written exam
 B. Mention the principles of : -Hematological changes in liver diseases. -Blood transfusion. 		
C. State update and evidence based Knowledge of -Anemias in tropics -Myloproliferative and lymphoproliferative disorders.		
D. Memorize the facts and principles of the relevant basic and clinically supportive sciences related to Hematology.		
E. Mention the basic ethical and medicolegal principles that should be applied in practice and are relevant to Hematology		
F. Mention the basics and standards of quality assurance to ensure good clinical practice in the field of Hematology		
G. Mention the ethical and scientific principles of medical research methodology.		
H. State the impact of common health problems in the field of Hepatology on the society and how good clinical practice improve these problems.		

B-Intellectual outcomes

Methods of	Methods of
teaching/	Evaluation
learning	
-Clinical rounds	Procedure/case presentation
-Senior staff	Log book
experience	
	teaching/ learning -Clinical rounds -Senior staff

C-Practical skills (Patient Care)

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Obtain proper history and examine patients in	-Didactic;	-OSCE at the
caring and respectful behaviors.	-Lectures	end of each
	-Clinical	year
	rounds	-log book &
	-Seminars	portfolio
	-Clinical	- One MCQ
	rotations	examination
	(service	at the
	teaching)	second half
		of the
		second year
B. Order the following non invasive/invasive	Clinical	-Procedure
diagnostic procedures	round with	presentation
-Routine appropriate Laboratory investigations	senior staff	- Log book

related to conditions mentioned in A.A as -Chest x-ray -Urine analysis -Stool analysis -CBC, Blood film -Liver function tests - Abdominal Ultrasonography -CT abdomen - Upper and lower endoscopies.	Observation Post graduate teaching	- Chick list
C. Interpret the following non invasive/invasive diagnostic procedures -Results of Routine appropriate Lab investigations related to conditions mentioned in A.A. -Abdominal Ultrasonography.	Clinical round with senior staff	-Procedure presentation - Log book - Chick list
 D. Perform the following non invasive/invasive diagnostic and therapeutic procedures. -Abdominal US . -Liver biopsy under supervision 	Clinical round with senior staff -Perform under supervision of senior staff	-Procedure presentation - Log book - Chick list
 E. Prescribe the following non invasive/invasive therapeutic procedures: -Application of Intravenous catheter. -Prescribe proper treatment for conditions mentioned in A.A -Give Blood transfusion 	Clinical round with senior staff Perform under supervision of senior staff	 Procedure presentation Log book Chick list
F. Carry out patient management plans for common conditions related to Hematology.	Clinical round with senior staff	
 G. Use information technology to support patient care decisions and patient education in common clinical situations related to Hematology. H. Provide health care services aimed at preventing 		

health problems related to Hematology like: -Delayed diagnosis of neoplastic blood diseases - Anemia.	
I. Provide patient-focused care in common conditions related to Hematology, while working with health care professionals, including those from other disciplines like:	
Conditions mentioned in A.A.	
J.Write competently all forms of patient charts and	
sheets including reports evaluating these charts and	
sheets (Write a consultation note, Inform patients of a	
diagnosis and therapeutic plan, completing and maintaining medical records).	

D-General Skills

Practice-Based Learning and Improvement

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ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Perform practice-based improvement	-Case log	Procedure/case
activities using a systematic methodology (share	-Observation	presentation
in audit and risk management activities and use	and	-Log book and
logbook).	supervision	Portfolios
	-Written & oral	
	communication	
B. Appraises evidence from scientific	-Journal clubs	
studies(journal club)	- Discussions in	
	seminars and	
	clinical rounds	
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data		
entry and analysis using information technology		
to manage information, access on-line medical		
information; and support their own education.		
E. Facilitate learning of junior students and	Clinical rounds	
other health care professionals including their	Senior staff	
evaluation and assessment.	experience	

Interpersonal and Communication Skills

ILOs	Methods of	Methods of	
	teaching/	Evaluation	
	learning		
F. Maintain therapeutic and ethically sound	Simulations	Global rating	
relationship with patients.	Clinical	Procedure/case	
	round	presentation	
	Seminars	Log book	
	Lectures	Portfolios	
	Case	Chick list	
	presentation		
G. Elicit information using effective nonverbal,			
explanatory, questioning, and writing skills.			
H. Provide information using effective nonverbal,			
explanatory, questioning, and writing skills.			
I. Work effectively with others as a member of a			
health care team or other professional group.			
J. Present a case in common problems related to	Clinical	Clinical Exam	
Hematology.	round		
	Seminars		
K. Write a report :	Senior staff	Chick list	
-Patients medical report	experience		
-Abdominal Ultrasonography report			
- Discharge report			
-Death report			
L. Council patients and families about:	Clinical		
-Anemia in liver disease.	round with		
- Hazards of blood transfusion	senior staff		

Professionalism

ILOs	Methods of	
	teaching/	Evaluation
	learning	
M. Demonstrate respect, compassion, and integrity;	Observation	1. Objective
a responsiveness to the needs of patients and society	Senior staff	structured
	experience	clinical
	Case taking	examination
		2. Patient
		survey
N. Demonstrate a commitment to ethical principles		1.3600
including provision or withholding of clinical care,		global rating
confidentiality of patient information, informed		
consent, business practices		
O. Demonstrate sensitivity and responsiveness to		1. Objective
patients' culture, age, gender, and disabilities		structured
		clinical
		examination
		2. 3600
		global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems including good administrative and time management.	Observation Senior staff experience	1. 360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		 Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		 360o global rating Patient survey

Unit (Module) 6 Tropical emergencies

A -	<u>Knowledge</u>	and	understanding
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ILOs	Methods of	Methods of
	teaching/	Evaluation
	-	Evaluation
	learning Didactic:	-OSCE at
A. Describe the etiology, clinical picture, diagnosis	Didactic;	
and management of the following diseases	Lectures	the end of
and clinical conditions:	Seminars	each year
-Upper GIT bleeding		-log book &
-Lower GIT bleeding		portfolio
-Acute abdominal pain (specially , medical causes		- one MCQ
of acute abdomen)		examination
-Intestinal obstruction and (pseudo obstruction)		at the
-Diabetic emergencies (Hyperglycaemia,		second year
Hypoglycaemia)		-Oral and
-Sever gastroenteritis (dehydration) and electrolyte		written
imbalance		exam
-Hepatic encephalopathy		
-Hepatorenal syndrome		
-Fulminant hepatitis		
-Blood transfusion reactions		
-Cardiac arrest		
-Pulmonary oedema		
-Heat stroke		
-Shocked patients		
others as seen in the ICU		
B. Mention the principles of		
Total parenteral nutrition		
Mechanical ventilation		
Oxygen therapy		
C. State update and evidence based Knowledge of		
-Hepatic encephalopathy		
-Hepatorenal syndrome		

-Fulminant hepatitis	
D. Memorize the facts and principles of the	
relevant basic and clinically supportive sciences	
related to Tropical emergencies.	
E. Mention the basic ethical and medicolegal	
principles revenant to the Tropical	
emergencies.	
F. Mention the basics of quality assurance to	
ensure good clinical care in his field	
G. Mention the ethical and scientific principles of	
medical research	
H. State the impact of common health problems	
in the field of Tropical emergencies on the	
society.	

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases related to Tropical emergencies.	-Clinical rounds -Senior staff experience	Procedure/case presentation Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Tropical emergencies.		
C. Design and present cases , seminars in common problem		
D-Formulate management plans and alternative decisions in different situations in the field of the Tropical emergencies.		

C- Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-OSCE at the end of each year -log book & portfolio - One MCQ examination at the second half of the second year
 B. Order the following non invasive/invasive diagnostic procedures -Urgent appropriate Lab investigations related to conditions mentioned in A.A -X ray abdomen. -Abdominal Ultrasonography -CT abdomen -Upper and lower endoscopy(diagnostic and therapeutic) 	Clinical round with senior staff Observation Post graduate teaching	-Procedure presentation - Log book - Chick list
 C. Interpret the following non invasive/invasive diagnostic procedures -Urgent appropriate Lab investigations related to conditions mentioned in A.A -Blood sugar and Blood gases -X ray abdomen. -Abdominal Ultrasonography -CT abdomen -Upper and lower endoscopy 	Clinical round with senior staff	-Procedure presentation - Log book - Chick list
D. Perform the following non invasive/invasive therapeutic procedures	Clinical round with	-Procedure presentation

-Blood sugar testing.	senior staff	- Log book
-Ryle's tube insertion	-Perform	- Chick list
- Sengestaken tube insertion	under	
Application of urinary catheter.	supervision	
-Cannulation including Central venous line	of senior	
-Endotracheal intubation	staff	
-Arterial Blood gas sampling		
E. Prescribe the following non invasive/invasive		
therapeutic procedures :		
-Management of tropical emergencies		
F. Carry out patient management plans for common		
conditions related to Tropical emergencies		
G. Use information technology to support patient		
care decisions and patient education in common		
clinical situations related to Tropical		
emergencies.		
H. Provide health care services aimed at preventing		
health problems related to Tropical emergencies.		
I-Provide patient-focused care in common conditions		
related to Tropical emergencies., while working		
with health care professionals, including those		
from other disciplines like:		
General surgery and post operative intensive care		
unit.		
J-Write competently all forms of patient charts and		
sheets including reports evaluating these charts		
and sheets.(Write a consultation note, Inform		
patients of a diagnosis and therapeutic plan,		
completing and maintaining medical records)		

D- <u>General Skills</u> Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement	-Case log	Procedure/case
activities using a systematic	-Observation	presentation
methodology(audit, logbook)	and	-Log book and
	supervision	Portfolios
	-Written & oral	
	communication	
B. Appraises evidence from scientific	-Journal clubs	
studies(journal club)	- Discussions in	
	seminars and	
	clinical rounds	
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data		
entry and analysis.		
E. Facilitate learning of junior students and		
other health care professionals.		
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Interpersonal and Communication Skills

ILOs	Methods of	Methods of	
	teaching/	Evaluation	
	learning		
F. Maintain therapeutic and ethically sound relationship with patients.	Simulations Clinical round Seminars Lectures Case presentation	Global rating Procedure/case presentation Log book Portfolios Chick list	
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.			
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.			

I. Work effectively with others as a member of a health care team or other professional group.	Senior staff experience	
J. Present a case in any problem related to tropical emergencies.	Clinical round Seminars	Clinical Exam
K. Write death report and discharge report and mortality rate report in ICU.		
L. Council patients and families about -Morbidity and mortality related to tropical emergencies that mentioned in A.A.		

Professionalism

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	Observation Senior staff experience Case taking	 Objective structured clinical examination Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		1. 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		 Objective structured clinical examination 3600 global rating

Systems-Based Practice

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
P. Work effectively in relevant health care	Observation	1. 360o global
delivery settings and systems.	Senior staff	rating
	experience	
Q. Practice cost-effective health care and		1. Check list
resource allocation that does not		evaluation of live
compromise quality of care.		or recorded
		performance
R. Assist patients in dealing with system		1. 360o global
complexities.		rating
		2. Patient survey

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: Second part

Торіс	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
	Unit 1 Hep	atology		
Acute viral hepatitis (A,B.C,D	А,С-Н	A-D	A-J	A-L, M-R
,E)				
Chronic hepatitis	A,C-H	A-D	A-J	A-L, M-R
Liver cirrhosis and its	A,C-H	A-D	A-J	A-K, M-R
complications				
Liver cell failure	A,D-H	A-D	A-J	A-K, M-R
Ascites	A,C-H	A-D	A-J	A-K, M-R
NAFLD(Fatty liver and NASH	A,C-H	A-D	A-J	A-K, M-R
and insulin resistance)				
Spontaneous Bacterial	A,C-H	A-D	A-J	A-K, M-R

peritonitis				
Hepatorenal syndrome	A,C-H	A-D	A-J	A-K, M-R
Hepatic encephalopathy	A,C-H	A-D	A-J	A-K, M-R
Primary Malignant tumors	A,D-H	A-D	A-J	A-L, M-R
Secondary Malignant tumors	A,D-H	A-D	A-J	A-L, M-R
Benign Liver tumors	A,D-H	A-D	A-J	A-L, M-R
Liver abscesses	A,D-H	A-D	A-J	A-K, M-R
Cholecystitis (Acute &	A,D-H	A-D	A-J	A-K, M-R
chronic)				
Autoimmune hepatitis	A,C-H	A-D	A-J	A-K, M-R
Fulminant Hepatitis	A,C-H	A-D	A-J	A-K, M-R
Primary biliary cirrhosis	A,D-H	A-D	A-J	A-K, M-R
Budd – chiari syndrome	A,D-H	A-D	A-J	A-K, M-R
Metabolic liver diseases	A,D-H	A-D	A-J	A-K, M-R
Hereditary Liver disease	A,D-H	A-D	A-J	A-K, M-R
Alcoholic liver diseases	A,D-H	A-D	A-J	A-K, M-R
Hepatopulmonary syndrome	A,C-H	A-D	A-J	A-K, M-R
Drug induced liver disease	A,D-H	A-D	A-J	A-K, M-R
Jaundice and Cholestasis	В	A-D	A-J	A-K, M-R
Liver diseases in pregnancy	В	A-D	A-J	A-K, M-R
Liver diseases in elderly	В	A-D	A-J	A-K, M-R
Liver in systemic diseases	В	A-D	A-J	A-K, M-R
Hepatosplenomegaly	В	A-D	A-J	A-K, M-R
Portal hypertension	B,C	A-D	A-J	A-K, M-R
Gall stones	В	A	A-J	A-K, M-R
Abdominal US (Diagnostic	В	A	A-J	K
and Interventional)				
Assessment of surgical risk in	В	A	A-J	A-K, M-R
liver cirrhosis				
liver and heart	В	A-D	A-J	A-K, M-R
Liver and kidney	В	A-D	A-J	A-K, M-R
Liver and lung	В	A-D	A-J	A-K, M-R
Antiviral drugs	B,C	A,D	A-J	A-K, M-R
Drugs used in liver disease.	В	A, D	A-J	A-K, M-R

Liver biopsy.	В	А	D	K
-Guidelines in management	A,C-H	D	E-G,I,J	A-K, M-R
of chronic hepatitis B and C).				
- Guidelines in management	B,C-H	D	E-G,I,J	A-K, M-R
of Portal hypertension				
Liver transplantation	В	А	A-J	A-K, M-R
Updates in Hepatology	С	А	A-J	A-K, M-R
L	Jnit 2 Gastroe	enterology		
-GERD	A,D-H	A-D	A-G,I	A-K, M-R
-Oesophageal tumors	A,D-H	A-D	A-G,I	A-K, M-R
-Gastritis - Non ulcer dyspepsia	A,C-H	A-D	A-G,I	A-R
- Peptic ulcer	А, С-Н	A-D	A-G,I	A-R
-Intestinal tuberculosis	A,D-H	A-D		A-K, M-R
-Tuberculous peritonitis	A,D-H	A-D		A-K, M-R
-Gastroparesis	A,D-H	A-D	A-G,I	A-K, M-R
-Zollinger Ellison syndrome	A,D-H	A-D	A-G,I	A-K, M-R
-Gastric tumors	A,D-H	A-D		A-R
-Intestinal obstruction	A,D-H	A-D	A-G,I,J	A-K, M-R
-Intestinal pseudo-	A,D-H	A-D	A-G,I,J	A-K, M-R
obstruction				
-Irritable bowel syndrome	A,C-H	A-D	A-G,I,J	A-R
-Celiac disease	A,D-H	A-D	A-J	A-R
-Tropical spru	A,D-H	A-D	A-J	A-K, M-R
-Whipple's disease	A,D-H	A-D	A-J	A-K, M-R
-Pseudomemberanous colitis	A,D-H	A-D	A-J	A-K, M-R
-Crohn's disease	A,C-H	A-D	A-J	A-R
-Ulcerative colitis	A,C-H	A-D	A-J	A-R
-Diverticular disease of the	A,D-H	A-D	A-G,I,J	A-K, M-R
colon				
-Small bowel tumors	A,D-H	A-D	A-J	A-R
-Colonic tumors and	A,D-H	A-D	A-I	A-R
screening of colorectal				
cancer.				
-Haemorrhoids	A,D-H	A-D	A-G,I,J	A-K, M-R

-Acute pancreatitis	A,C-H	A-D	A-J	A-K, M-R
-Chronic pancreatitis	A,C-H	A-D	A-J	A-K, M-R
-Carcinoma of the pancreas	A,D-H	A-D	A-J	A-R
-Endocrinal tumors of the	A,D-H	A-D	A-J	A-R
pancreas				
- Gastrointestinal bleeding	В,С-Н	A-D	A-J	A-K, M-R
-Vomiting	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
-Dysphagia	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
-Abdominal pain and Post-	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
cholecystectomy syndrome				
-Diarrhea (Acute and	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
chronic)				
-Constipation	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
-Dysentery (Acute, chronic)	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
-Caustic injury	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
– foreign body	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
-Motility disorder	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
-Intestinal parasites	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
-Intestinal ischemia	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
-Vascular malformation of	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
the GIT				
-Gastrointestinal polyposis	В <i>,</i> D-Н	A-D	A-J	A-R
- Malabsorption	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
-Protein losing enteropathy	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
-Drug induced damage of	В <i>,</i> D-Н	A-D	A-J	A-K, M-R
the Gastrointestinal tract				
-Drugs for peptic ulcers	В, С-Н	A-D	A-G,I,J	A-K, M-R
-Drugs for GIT bleeding	В, С-Н	A-D	A-G,I,J	A-K, M-R
-Endoscopy in	В	А	B-C	A-I, M-R
Gastrointestinal tract.				
-Radiology in	В	A	B-C	A-I, M-R
Gastrointestinal tract.				
Updates				
	Unit 3 Inf	ection		

Bacterial infections				
Typhoid fever	A,C-H	A-D	A-J	A-R
Salmonella infection other	A,C-H	A-D	A-J	A-R
than typhoid				
Shigellosis	A,C-H	A-D	A-J	A-R
Campylobacter enteritis	A,C-H	A-D	A-J	A-R
Cholera	A,C-H	A-D	A-J	A-R
E coli	A,C-H	A-D	A-J	A-R
Brucellosis	A,C-H	A-D	A-J	A-R
Legionellosis	A,C-H	A-D	A-J	A-R
Haemophilus species	A,C-H	A-D	A-J	A-R
Mycobacteria	A,C-H	A-D	A-J	A-R
Spirochetal disease	А,С-Н	A-D	A-J	A-R
- Leptospirosis				
- Relapsing fever				
- Ricketsial disease				
Other bacteria	А,С-Н	A-D	A-J	A-R
- Anthrax				
- Pseudomonas				
-Yersinia infection				
- Cat scratch disease				
- Clostridial disease				
- Anaerobic infection				
Infectious diarrhea	A,C-H	A-D	A-J	A-R
Entero-colitides	A,D-H		A-J	A-R
Food poisoning	A,D-H	A-D	A-J	A-R
Pseudo membranous colitis	А,С-Н	A-D	A-J	A-R
H. pylori infection	A,D-H		A-J	A-R
Pneumonia	А,С-Н	A-D	A-J	A-R
Rheumatic Fever	A,D-H	A-D	A-J	A-R
Infective Endocarditis	A,D-H	A-D	A-J	A-R
Staphylococcal Infections	A,D-H		A-J	A-R
Streptococcal infection	A,D-H	A-D	A-J	A-R
Bacterial Meningitis	А,С-Н	A-D	A-J	A-R

Meningococcal Infections	A,C-H	A-D	A-J	A-R
Liver abscess	A,C-H	A-D	A-J	A-R
Viral diseases				
Exanthems and Mumps	A,C-H	A-D	A-J	A-R
Measles				
Rubella				
Varicella				
Mumps				
Herps simplex virus				
infection				
HIV infection	А,С-Н	A-D	A-J	A-R
Infectious mononucleosis	A,D-H		A-J	A-R
Cytomegalovirus	A,D-H	A-D	A-J	A-R
Enteric viral infection	A,D-H	A-D	A-J	A-R
Enteroviruses				
Viral gastroenteritis				
Influenza (and update)	A,C-H	A-D	A-J	A-R
Severe Acute Respiratory	A,C-H		A-J	A-R
Syndrome (SARS)				
hemorrhagic fever viruses	A,C-H	A-D	A-J	A-R
COVID-19	A,C-H	A-D	A-J	A-R
Parasitic diseases				
Trematode infection	A,D-H	A-D	A-J	A-R
Schistosomiasis				
Liver, intestinal and lung				
fluke infection				
Cestode infection	A,D-H	A-D	A-J	A-R
Echinococcosis				
Taeniasis/Cysticercosis				
Hymenolepiasis				
Diphyllobothriasis				
Nematode infection	A,D-H	A-D	A-J	A-R
Ascariasis				
Enterobiasis				

Strongyloidiasis Trichinosis (Trichinella spiralis) Trichuriasis (Trichuris trichiura) - Intestinal Capillariasis (Capillaria philippinensis), Capillaria hepatica Visceral larva migrans/Toxocariasis hookworm Filariasis				
Protozoon disease Amebiasis Giardiasis Malaria and Babesiosis Leishmaniasis Toxoplasmosis Cryptosporidiosis Pneumocystis jiroveci (carini) pneumonia	A,D-H	A-D	A-J	A-R
Parasitic disease of the liver	A,D-H	A-D	A-J	A-R
Emerging infectious diseases	A,D-H	A-D	A-J	A-R
Others				
Pyrexia of unknown origin(PUO)	В	A-D	A-G,I,J	A-R
Fever with jaundice	В		A-G,I,J	A-R
Fever with sore throat	В	A-D	A-G,I,J	A-R
Fever with rigors	В	A-D	A-G,I,J	A-R
Fever with splenomegaly	В	A-D	A-G,I,J	A-R
Fever with hepatomegaly	В		A-G,I,J	A-R
Fever with lymphadenopathy	В	A-D	A-G,I,J	A-R
Fevers associated with sweating	В	A-D	A-G,I,J	A-R

Hospital acquired infection	В	A-D	A-I	A-R
Traveler diarrhea	В		A-J	A-R
Viral like agents	В	A-D	A-G,I,J	A-R
Fungal diseases	В	A-D	A-G,I,J	A-R
Zoonoses	В	A-D	A-G,I,J	A-R
Sexually transmitted	В	А	A-G,I,J	A-R
diseases				
Gonorrhea -				
Chlamydia infection -				
Viral infection including HIV				
Pathogenesis of pyrexia	В	A	A-G,I,J	A-R
Regulation of body	В	A	A-G,I,J	A-R
temperature				
Heat introduced disorders	В	A-D	A-G,I,J	A-R
Antimicrobial Chemotherapy	В	A,D	E,F,G	A-R
and their principals of use.				
Antiparasitic Chemotherapy	В	A,D	E,F,G	A-R
Chemoprophylaxis	В	A,D	E,F,G	A-R
Antimicrobial resistance	В	A,D	E,F,G	A-R
Antiviral drugs	В	A,D	E,F,G	A-R
Antifungal drugs	В	A,D	E,F,G	A-R
New emerging infection	В	A,D	E,F,G	A-R
Unit 4 nutrition				
Water-soluble vitamins	A,D-H	A-D	A-J	A-K,M-R
deficiency				
-Fat-soluble vitamins	A, D-H	A-D	A-J	A-K,M-R
deficiency				
Assessment of Malnutrition	В,С-Н	A-D	A-J	A-R
-Nutrition in liver diseases	В,С-Н	A-D	A-J	A-K,M-R
-Nutrition in celiac disease.	B,D-H	A-D	A-J	A-R
- Obesity	B,D-H	A-D	A-J	A-R
	Unit 5 Hem	atology		
-Anemias in tropics	А,С-Н	A-D	A-J	A-R

-Myloproliferative and	А,С-Н	A-D	A-J	A-R
lymphoproliferative				
disorders.				
-Hematological changes in	B,D-H	A-D	A-G,I,J	A-R
liver diseases				
Blood transfusion.	B,D-H	A-D	E,F,G,I,J	L, M-R
Un	it 6 Tropical e	emergencies		
-Upper and Lower GIT	A,D-H	A-D	A-J	A-R
bleeding				
Acute abdominal pain	A,D-H	A-D	A-J	A-R
(specially, medical causes of				
acute abdomen)				
Intestinal obstruction and	A,D-H	A-D	A-J	A-R
(pseudo obstruction)				
Diabetic emergencies	A,D-H	A-D	A-J	A-R
(Hyperglycaemia,				
Hypoglycaemia				
Sever gastroenteritis	A,D-H	A-D	A-J	A-R
(dehydration) and electrolyte imbalance				
-Hepatic encephalopathy	A,C,D-H	A-D	A-J	A-R
Hepatorenal syndrome		A-D A-D	A-J A-J	A-R A-R
Fulminant hepatitis	A,C,D-H	A-D A-D	A-J A-J	A-R
-Cardiac arrest	A,C,D-H A,D-H	A-D A-D	A-J A-J	A-R A-R
Blood transfusion reactions	A,D-H	A-D A-D	A-J A-J	A-R
	-	A-D A-D	A-J A-J	A-R
-Pulmonary oedema	A,D-H			
Heat stroke	A,D-H	A-D	A-J	A-R
-Shocked patients	A,D-H	A-D	A-J	A-R
others as seen in the ICU	P		A 1	
Total parenteral nutrition	В,	A-D	A-J	A-R
Mechanical	В,	A-D	A-J	A-R
ventilation				A D
Oxygen therapy	В,	A-D	A-J	A-R

5. Course Methods of teaching/learning:

- 1. Didactic (lectures, seminars, tutorial)
- 2. Outpatient
- 3. Inpatient
- 4. Case presentation
- 5. Direct observation
- 6. journal club
- 7. Critically appraised topic.
- 8. Educational prescription
- 9. Clinical rounds
- **10**. Clinical rotation
- **11**. Senior staff experience
- 12. Case log
- **13**. Observation and supervision
- 14. Written & oral communications
- **15**. Simulation
- **16**. Hand on work shop
- 17. Service teaching
- **18**. Perform under supervision of senior staff
- **19**. Postgraduate teaching

6. Course Methods of teaching/learning: for students with poor achievements

- 1. Extra Didactic (lectures, seminars, tutorial) according to their needs
- 2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

- 1. Oral examination
- 2. Clinical examination
- 3. Written examination
- 4. Objective structure clinical examination (OSCE)
- 5. Procedure/case Log book and Portfolios
- 6. Simulation

- 7. Record review (report)
- 8. Patient survey
- 9. 360o global rating
- 10. Check list evaluation of live or recorded performance
- 11. MCQ Exam
- ii. Time schedule: At the end of second part
- iii. Marks: 1200

8. List of references

- i. Lectures notes
 - Course notes
 - Staff members print out of lectures and/or CD copies
- ii. Essential books
 - Diseases of the liver and Biliary System (Sheila Sherlock and James Dooley) 11th edition,2008.
 - Diseases of the liver and Biliary System (Sheila Sherlock and James Dooley) 13th edition,2018
 - Cecil Textbook of Medicine; McGraw Hill; 16th edition, 2007.
 - Current Diagnosis & Treatment in Gastroenterology (2nd Ed.) – Appleton McGraw-Hill LANGE. 2016
 - Harrison's Infectious Diseases, 2nd Edition (2013)
- iii. Recommended books
 - Lawrence Handbook of Liver Disease. Second edition 2004
 - Sclisinger Text book of Gastroenterology
 - Hunter'S Tropical Medicine And Emerging Infectious Diseases /8Th Edn, BY Strickland.
 - Clinical Gastroenterology and Hepatology,2005.
 - Harrison's Principles of Internal medicine (self assessment)
- iv. Periodicals, Web sites, ... etc
 - Hepatology
 - Gut

- Journal of Hepatology
- J of Infectious diseases
- Am J of Gastroenterology

v. Others

None

9. Signatures

Course Coordinator:	Head of the Department:
Pr. Dr/ Abeer Sharaf Eldin	Pr. Dr/ Magda Shehata Hassan
Date: 5/2022	Date: 5/2022

ANNEX 2 Program Academic Reference Standards (ARS)

1- Graduate attributes for master degree in Tropical Medicine and Gastroenterology

The Graduate (after residence training and master degree years of study) must:

1- Have the capability to be a scholar, understanding and applying basics, methods and tools of scientific research and clinical audit *in Tropical Medicine and Gastroenterology*.

2- Appraise and utilise scientific knowledge to continuously update and improve clinical practice in related speciality.

3- Acquire sufficient medical knowledge in the basic biomedical, clinical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care in the field of *Tropical Medicine and Gastroenterology*.

4- Provide patient care that is appropriate, effective and compassionate for dealing with common health problems and health promotion using evidence-based and updated information.

5- Identify and share to solve health problems in his speciality.

6- Acquire all competencies –including the use of recent technologies- that enable him to provide safe, scientific, and ethical and evidence based clinical care including update use of new technology in *Tropical Medicine and Gastroenterology*.

7- Demonstrate interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professions, the scientific community and the public.

8- Function as supervisor, and trainer in relation to colleagues, medical students and other health professions.

9- Acquire decision making capabilities in different situations related to *Tropical Medicine and Gastroenterology*.

10- Show responsiveness to the larger context of the health care system, including e.g. the organisation of health care, partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations.

11- Be aware of public health and health policy issues and share in system-based improvement of health care.

12- Show appropriate attitudes and professionalism.

13- Demonstrate skills of lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages in *Tropical Medicine and Gastroenterology* or one of its subspecialties.

2- Competency based Standards for clinical master degree graduates

2.1- Knowledge and understanding

By the end of the program, the graduate should demonstrate satisfactory knowledge and understanding of

2-1-A- Established basic, biomedical, clinical, epidemiological and behavioral sciences related conditions, problem and topics.
2-1-B- The relation between good clinical care of common health problems in the speciality and the welfare of society.

2-1-C- Up to date and recent developments in common problems related to *Tropical Medicine and Gastroenterology*.

2-1-D- Ethical and medicolegal principles relevant to practice in *Tropical Medicine and Gastroenterology*.

2-1-E -Quality assurance principles related to the good medical practice in *Tropical Medicine and Gastroenterology*.

2-1-F- Ethical and scientific basics of medical research.

2.2- Intellectual skills:

By the end of the program, the graduate should be able to demonstrate the following:

2-2-A- Correlation of different relevant sciences in the problem solving and management of common diseases of *Tropical Medicine and Gastroenterology*.

2-2-B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to *Tropical Medicine and Gastroenterology*.

2.2- C- Demonstrating systematic approach in studying clinical problems relevant to *Tropical Medicine and Gastroenterology*.

2-2-D- Making alternative decisions in different situations in *Tropical Medicine and Gastroenterology*.

2.3- Clinical skills

By the end of the program, the graduate should be able to

2-3-A - Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

2-3-B- Demonstrate patient care skills relevant to *Tropical Medicine and Gastroenterology* for patients with common diseases and problems.

2-3- C- Write and evaluate reports for situations related to the field of *Tropical Medicine and Gastroenterology*.

2.4- General skills

By the end of the program, the graduate should be able to

Competency-based outcomes for Practice-based Learning and Improvement

2-4-A- Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence,, improvements in patient care and risk management.

2-4-B- Use all information sources and technology to improve his practice.

2-4-C- Demonstrate skills of teaching and evaluating others.

Competency-based objectives for Interpersonal and Communication Skills

2-4-D- Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and other health professionals.

4 Competency-based objectives for Professionalism

2-4-E- Demonstrate professionalism behaviors, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

Competency-based objectives for Systems-based Practice

2-4-F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value.

2-4-g- Demonstrate skills of effective time management.

2-4-H- Demonstrate skills of self and continuous learning.

Annex 3, Methods of teaching/learning

Annex 3, Methods of teaching/learning

	Patient care	Medical knowledge	Practice- based learning/ Improvement	and communication	Professional ism	Systems- based practice
Didactic (lectures, seminars, tutorial)	Х	Х		Х	Х	Х
journal club, Educational prescription	X X	X X	X X	Х	Х	Х
Present a case (true or simulated) in a grand round		Х	Х	Х	Х	
Observation and supervision	Х		Х	Х	Х	Х
conferences		Х	Х	Х		Х
Written assignments	Х	Х	Х	Х	Х	Х
Oral assignments	Х	Х	Х	Х	Х	Х

Teaching methods for knowledge

- Didactic (lectures, seminars, tutorial)
- journal club
- Critically appraised topic
- Educational prescription (a structured technique for following up on clinical questions that arise during rounds and other venues).
- Present a case (true or simulated) in a grand round
- Others

Teaching methods for patient care

- Observation and supervision /Completed tasks procedure/case logs
- On-the-job" training without structured teaching is not sufficient for this skill (checklists).
- Simulation is increasingly used as an effective method for skill/ teamwork training.

Teaching methods for other skills

- Written communication (e.g., orders, progress note, transfer note, discharge summary, operative reports, and diagnostic reports).
- Oral communication (e.g., presentations, transfer of care, interactions with patients, families, colleagues, members of the health care team) and/or non verbal skills (e.g., listening, team skills)
- Professionalism, including medical ethics, may be included as a theme throughout the program curriculum that includes both didactic and experiential components (e.g., may be integrated into already existing small group discussions of vignettes or case studies and role plays, computer-based modules) and may be modeled by the faculty in clinical practice and discussed with the resident as issues arise during their clinical practice.

Annex 4, Assessment methods

Annex 4, ILOs evaluation methods for Master Degree students.

Method	Practical K Intellectua skills		Intellectual	General skills			
	Patient care	К	I	Practice-based learning/ Improvement	Interpersonal and communication skills	Professionalism	Systems-based practice
Record review	Х	Х	Х		х	Х	Х
Checklist	Х				Х		
Global rating	Х	Х	Х	Х	Х	Х	Х
Simulations	Х	Х	Х	х	Х	Х	
Portfolios	Х	Х	Х	Х	Х		
Standardized oral examination	Х	Х	Х	Х	Х		Х
Written examination	Х	Х	Х	Х			х
Procedure/ case log	Х	х					
OSCE	Х	Х	Х	Х	Х	Х	Х

Annex 4, Glossary of Master Degree doctors assessment <u>methods</u>

- Record Review Abstraction of information from patient records, such as medications or tests ordered and comparison of findings against accepted patient care standards.
- Chart Stimulated Recall Uses the MSc doctor's patient records in an oral examination to assess clinical decisionmaking.
- Mini clinical evaluation: Evaluation of Live/Recorded Performance (single event) – A single resident interaction with a patient is evaluated using a checklist. The encounter may be videotaped for later evaluation.
- Standardized Patients (SP) Simulated patients are trained to respond in a manner similar to real patients. The standardized patient can be trained to rate MSc doctor's performance on checklists and provide feedback for history taking, physical examination, and communication skills. Physicians may also rate the MSc doctor's performance.
- Objective Structured Clinical Examination (OSCE) A series of stations with standardized tasks for the MSc doctors to perform. Standardized patients and other assessment methods often are combined in an OSCE. An observer or the standardized patient may evaluate the MSc doctors.
- Procedure or Case Logs MSc doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.
- PSQs Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by a MSc doctors.

- Case /problems assess use of knowledge in diagnosing or treating patients or evaluate procedural skills.
- Models: are simulations using mannequins or various anatomic structures to assess procedural skills and interpret clinical findings. Both are useful to assess practice performance and provide constructive feedback.
- 360 Global Rating Evaluations MSc doctors, faculty, nurses, clerks, and other clinical staff evaluate MSc doctors from different perspectives using similar rating forms.
- Portfolios A portfolio is a set of project reports that are prepared by the MSc doctors to document projects completed during the MSc study years. For each type of project standards of performance are set. Example projects are summarizing the research literature for selecting a treatment option, implementing a quality improvement program, revising a medical student clerkship elective, and creating a computer program to track patient care and outcomes.
- Examination MCQ A standardized examination using multiple-choice questions (MCQ). The in-training examination and written board examinations are examples.
- Examination Oral Uses structured realistic cases and patient case protocols in an oral examination to assess clinical decision-making.
- Procedure or Case Logs MSc doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.
- PSQs Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by MSc doctors.

Annex 5, program evaluation tools

By whom	Method	sample
Quality Assurance	Reports	#
Unit	Field visits	
External Evaluator	Reports	#
(s):According to	Field visits	
department		
council		
External Examiner		
(s): According to		
department		
council		
Stakeholders	Reports	#
	Field visits	
	questionnaires	
Senior students	questionnaires	#
Alumni	questionnaires	#

Annex 6, program Correlations:

مصفوفة توافق المعايير القومية القياسية العامة لبرامج الماجستير مع المعايير الأكاديمية المعتمدة من كلية الطب 🗌 جامعة أسيوط لدرجة الماجستير في طب المناطق الحارة و الجهاز الهضمي

I- General Academic Reference Standards (GARS) versus Program ARS

1- Graduate attributes

1- Graduate attributes			
Faculty ARS	NAQAAE General ARS for		
	Postgraduate Programs		
 Have the capability to be a scholar, understanding and applying basics, methods and tools of scientific research and clinical audit in <i>Tropical Medicine and</i> <i>Gastroenterology</i>. 	1- إجادة تطبيق أساسيات و منهجيات البحث العلمي واستخدام أدواته المختلفة		
2- Appraise and utilise scientific knowledge to continuously update and improve clinical practice in <i>Tropical Medicine and</i> <i>Gastroenterology</i> .	2-تطبيق المنهج التحليلي واستخدامه في مجال التخصص		
3- Acquire sufficient medical knowledge in the basic biomedical, clinical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care in <i>Tropical</i> <i>Medicine and Gastroenterology</i> .	3-تطبيق المعارف المتخصصة و دمجها مع المعارف ذات العلاقة في ممارسته المهنية		
 4- Provide patient care that is appropriate, effective and compassionate for dealing with common health problems and health promotion using evidence-based and update information. 	4-إظهار وعيا بالمشاكل الجارية و الرؤى الحديثة في مجال التخصص		
5- Identify and share to solve health problems in <i>Tropical Medicine and Gastroenterology</i> .	5-تحديد المشكلات المهنية و إيجاد حلولا لها		
6- Acquire all competencies that enable him to provide safe, scientific, ethical and evidence based clinical care including update use of new technology in <i>Tropical</i> <i>Medicine and Gastroenterology</i> .	6-إتقان نطاق مناسب من المهارات المهنية المتخصصة، واستخدام الوسائل التكنولوجيةالمناسبة بما يخدم ممارسته المهنية		

 7- Demonstrate interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professions, the scientific community and the public. 8- Function as supervisor, and trainer in relation to colleagues, medical students and other health professions 	7-التواصل بفاعلية و القدرة على قيادة فرق العمل
9- Acquire decision making capabilities in different situations related to <i>Tropical</i> <i>Medicine and Gastroenterology</i>	8-اتخاذ القرار في سياقات مهنية مختلفة
10- Show responsiveness to the larger context of the health care system, including e.g. the organisation of health care, partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations.	9- توظيف الموارد المتاحة بما يحقق أعلي استفادة و الحفاظ عليها
11- Be aware of public health and health policy issues and share in system-based improvement of health care.	10-إظهار الوعي بدوره في تنمية المجتمع و الحفاظ على البيئة في ضوء المتغيرات العالمية و الإقليمية
12- Show appropriate attitudes and professionalism.	11-التصرف بما يعكس الالتزام بالنزاهة و المصداقية و الالتزام بقواعد المهنة
13- Demonstrate skills of lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages in <i>Tropical Medicine</i> <i>and Gastroenterology</i> or one of its subspecialties.	12-تنمية ذاته أكاديميا و مهنيا و قادرا علي التعلم المستمر

2. Academic standard

Faculty ARS	NAQAAE General ARS for Postgraduate Programs
2.1.A -Established basic, biomedical, clinical, epidemiological and behavioral sciences related conditions, problems and topics.	2−1-أ⊣النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة.
2.1.B- The relation between good clinical care of common health problems in <i>Tropical Medicine and</i> <i>Gastroenterology</i> and the welfare of society.	1-2-ب-التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة.
2.1. C- Up to date and recent developments in common problems related to <i>Tropical Medicine and</i> <i>Gastroenterology</i>	2−1-ج ⊣لتطورات العلمية في مجال التخصص.
2.1. D- Ethical and medicolegal principles relevant to practice in the <i>Tropical Medicine and Gastroenterology</i>	2−1−د –المبادئ الأخلاقية و القانونية للممارسة المهنية في مجال التخصص.
2.1. E-Quality assurance principles related to the good medical practice in <i>Tropical</i> <i>Medicine and Gastroenterology</i> .	2–1–هـ– مبادئ و أساسيات الجودة في الممارسة المهنية في مجال التخصص
2.1. F- Ethical and scientific basics of medical research.	2-1-و – أساسيات وأخلاقيات البحث العلمي
 2.2. A-Correlation of different relevant sciences in the problem solving and management of common diseases of <i>Tropical Medicine and Gastroenterology</i>. 2.2. B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to <i>Tropical Medicine and Gastroenterology</i>. 	2–2–أ– تحليل و تقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل

2.2. B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to <i>Tropical Medicine</i> and Gastroenterology.	2-2-ب- حل المشاكل المتخصصة مع عدم توافر بعض المعطيات
2.2. A-Correlation of different relevant sciences in the problem solving and management of common diseases of <i>Tropical Medicine and</i> <i>Gastroenterology</i> .	2-2-ج- الربط بين المعارف المختلفة لحل المشاكل المهنية
2.2. C- Demonstrating systematic approach in studying clinical problems relevant to the Tropical Medicine and Gastroenterology	2-2-د- إجراء دراسة بحثية و /أو كتابة دراسة علمية منهجية حول مشكلة بحثية
2.4.A-Demonstrate practice-based learning and Improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management	2–2هـ- تقييم المخاطر في الممارسات المهنية في مجال التخصص
2.4.A-Demonstrate practice-based learning and Improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management	2–2–و – التخطيط لتطوير الأداء في مجال التخصص
2.2.D- Making alternative decisions in different situations in the field of <i>Tropical Medicine and</i> <i>Gastroenterology</i> .	2–2–ز – اتخاذ القرارات المهنية في سياقات مهنية متنوعة
2.3.A- provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.	2-3-أ- إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص
2.3.B- Demonstrate patient care skills relevant to <i>Tropical Medicine</i> and Gastroenterology for patients with	

common diseases and problems.	
2.3.C- Write and evaluate reports for	2-3-ب- كتابة و تقييم التقارير المهنية
Situation related to Tropical Medicine	
and Gastroenterology	
2.3.A- provide patient care that is	2–3–ج– تقييم الطرق و الأدوات القائمة في مجال
compassionate, appropriate, and	
effective for the treatment of health	التخصص
problems and the promotion of health.	
2.3.B- Demonstrate patient care skills	
relevant to that speciality for patients	
with common diseases and problems.	
2.4.D- Demonstrate interpersonal and	2−4–أ⊣لتواصل الفعال بأنواعه المختلفة
communication skills that result in	
effective information exchange and	
teaming with patients, their families,	
and other health professionals.	
2.4.A-Demonstrate practice-based	2-4-ب- استخدام تكنولوجيا المعلومات بما يخدم
learning and improvement skills that	
investigation and evaluation involves	الممارسة المهنية
of their own patient care, appraisal and	
assimilation of scientific evidence,	
improvements in patient care and risk	
management	
2.4.B- Use all information sources and	
technology to improve his practice.	
2.4.A-Demonstrate practice-based	2-4-ج- التقييم الذاتي وتحديد احتياجاته التعلمية
learning and improvement skills that	· · · · · · · · · · · · · · · · · · ·
involves investigation and evaluation of	اسكصيه
their own patient care, appraisal and	
assimilation of scientific evidence,	
improvements in patient care and risk	
management	
2.4.B- Use all information sources	
and technology to improve his	
practice.	
2.4.E-Demonstrate professionalism behavior,	
as manifested through a commitment to	
carrying out professional	
responsibilities, adherence to ethical	

principles, and sensitivity to a diverse patient population.	
2.4.A-Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, , improvements in patient care and risk management.	2-4-د- استخدام المصادر المختلفة للحصول على المعلومات و المعارف
2.4. C- Demonstrate skills of teaching and evaluating others.	2–4–ه– وضع قواعد ومؤشرات تقييم أداء الأخرين
2.4. F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value.	2-4-و- العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة
2.4.G- Demonstrate skills of effective time management.	2-4-ز - إدارة الوقت بكفاءة
2.4.H- Demonstrate skills of self and continuous learning.	2-4-ح- التعلم الذاتي و المستمر

Comparison between ARS and ILOS for master degree in Tropical Medicine and Gastroenterology.

(ARS)	(ILOs)
2-1- Knowledge and	2-1- Knowledge and understanding
understanding 2-1-A- Established basic, biomedical, clinical, epidemiological and behavioral sciences related conditions, problem and topics.	 2-1-A- Explain the essential facts and principles of relevant basic sciences including, Physiology, Anatomy , Parasitology , Pathology, pharmacology, Microbiology and Public health related to Tropical Medicine and Gastroenterology. 2-1-B- Mention essential facts of clinically supportive sciences including Basics of internal Medicine and Clinical pathology related to Tropical Medicine and Gastroenterology. 2-1-C- Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to Tropical Medicine and Gastroenterology.
 2-1-B The relation between good clinical care of common health problem in the Tropical Medicine and Gastroenterology and the welfare of society. 	2-1-H- State the impact of common health problems in the field of Tropical Medicine and Gastroenterology on the society and how good clinical practice improve these problems.
2-1-C- Up to date and recent developments in common problems related to	2-1-C- Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention and

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the field of Tropical	treatment of the common
Medicine and	diseases and situations related to
Gastroenterology.	Tropical Medicine and
	Gastroenterology.
	2-1-D - Give the recent and update
	developments in the
	pathogenesis, diagnosis,
	prevention and treatment of
	common diseases related to
	Tropical Medicine and
	Gastroenterology.
2-1-D- Ethical and	2-1-E- Mention the basic ethical and
medicolegal	medicolegal principles that should
Principles relevant	be applied in practice and are
to practice in the	relevant to the field of Tropical
Tropical Medicine	Medicine and Gastroenterology.
and	
Gastroenterology	
field.	
2-1-E-Quality assurance	2-1-F- Mention the basics and standards
principles	of quality assurance to ensure
related to the good	good clinical practice in the field
medical practice in	of Tropical Medicine and
the Tropical	Gastroenterology.
Medicine and	
Gastroenterology	
field.	
2-1-F- Ethical and scientific basics	2-1-G- Mention the ethical and scientific
of medical research.	principles of medical research
	methodology.
2-2- Intellectual skills:	2-2- Intellectual skills:
2-2-A- Correlation of	2-2-A- Correlate the facts of relevant
different relevant	basic and clinically supportive
sciences in the	sciences with clinical reasoning,
problem solving and	diagnosis and management of
management of	common diseases of the Tropical
common diseases of	Medicine and Gastroenterology.
the Tropical	
Medicine and	

Gastroenterology.	
2-2-B-Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to Tropical Medicine and Gastroenterology.	2-2-B- Demonstrate an investigatory and analytic thinking approach (problem solving) to common clinical situations related to Tropical Medicine and Gastroenterology.
2-2-C- Demonstrating systematic approach in studding clinical problems relevant to the Tropical Medicine and Gastroenterology field.	2-2-C- Design and /or present a case or review (through seminars/journal clubs.) in one or more of common clinical problems relevant to the Tropical Medicine and Gastroenterology field.
2-2-D Making alternative decisions in different situations in the field of the Tropical Medicine and Gastroenterology.	2-2-D- Formulate management plans and alternative decisions in different situations in the field of the Tropical Medicine and Gastroenterology.

Continuous	continuous
(ARS)	(ILOs)
<u>2-3- Clinical skills:</u>	2/3/1/Practical skills (Patient Care :)
 2-3-A- Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. 2-3-B- Demonstrate patient care skills relevant to that Tropical Medicine and Gastroenterology for patients with common diseases and problems. 	 2-3-1-A- Obtain proper history and examine patients in caring and respectful behaviors. 2-3-1-B- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment for common conditions related to Tropical Medicine and Gastroenterology. 2-3-1-C- Carry out patient management plans for common conditions related
problems.	 plans for common conditions related to Tropical Medicine and Gastroenterology. 2-3-1-D- Use information technology to support patient care decisions and patient education in common clinical situations related to Tropical Medicine and Gastroenterology.
	2-3-1-E- Perform competently non invasive and invasive procedures considered essential for the Tropical Medicine and Gastroenterology.
	2-3-1-F- Provide health care services aimed at preventing health problems related to Tropical Medicine and Gastroenterology.

2-3-C- Write and evaluate reports for situations related to the field of Tropical Medicine and Gastroenterology.	 2-3-1-G- Provide patient-focused care in common conditions related to Tropical Medicine and Gastroenterology, while working with health care professionals, including those from other disciplines. -3-1-H Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets. (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records).
 <u>2-4- General skills</u> 2-4-A- Demonstrate practice-based 	 <u>2/3/2 General skills</u> 2-3-2-A- Perform practice-based improvement
learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence,	 activities using a systematic methodology (share in audits and risk management activities and use logbooks). 2-3-2-B- Appraises evidence from scientific studies.
improvements in patient care and risk management	2-3-2-C- Conduct epidemiological studies and surveys.
2-4-B- Use all information sources and technology to improve his	2-3-2-C- Conduct epidemiological studies and surveys.
practice.	2-3-2-D .Perform data management including data entry and analysis and using information technology to manage information, access on-line medical information; and support their own education.
2-4-C- Demonstrate skills of teaching and evaluating others.	2-3-2-E- Facilitate learning of students other health care professionals including their evaluation and assessment.
2-4-D- Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and	 2-3-2-F- Maintain therapeutic and ethically sound relationship with patients. 2-3-2-G- Elicit information using effective nonverbal, explanatory, questioning, and

other health professionals.	 writing skills. 2-3-2-H- Provide information using effective nonverbal, explanatory, questioning, and writing skills. 2-3-2-I- Work effectively with others as a member of a health care team or other professional group.
2-4-E-Demonstrate professionalism behaviors, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.	 2-3-2-J- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society. 2-3-2-K- Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices. 2-3-2-L-Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.
2-4-F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value.	 2-3-2-M-Work effectively in relevant health care delivery settings and systems including good administrative and time management 2-3-2-N- Practice cost-effective health care and resource allocation that does not compromise quality of care. 2-3-2-O- Assist patients in dealing with system complexities.
 2-4-G- Demonstrate skills of effective time management 2-4-H- Demonstrate skills of self and continuous learning. 	 2-3-2-M-Work effectively in relevant health care delivery settings and systems including good administrative and time management 2-3-2-A- Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities and use logbooks).

III-Program matrix Knowledge and Understanding

Course	Knowledge and Understanding Program covered ILOs							
	2/1/A	2/1/B	2/1/C	2/1/D	2/1/E	2/1/F	2/1/G	2/1/H
Course 1 :	~							
Microbiology and								
pharmacology								
course 2 :	✓							
Parasitology and								
Public health								
course 3 :	√							
Pathology and								
Anatomy								
Course 4 :	✓							
Physiology								
Course 5 : Internal	~	√	√	√	√	√	✓	✓
Medicine								
Course 6: Clinical	✓							
Pathology								
Course 7 :	√	√	√	√	✓	√	√	✓
Principals of								
Tropical Medicine								
and								
Gastroenterology								

Intellectual

Course	Program covered ILOs						
	2/2/A	2/2/B	2/2/C	2/2/D			
Course 1 : Microbiology and	✓						
pharmacology							
course 2 : Parasitology and	\checkmark						
Public health							
course 3: Pathology and	\checkmark						
Anatomy							
Course 4 : Physiology	~	\checkmark					
Course 5 : Internal Medicine	√						
Course 6: Clinical Pathology	~						
Course 7 : Principals of	✓	\checkmark	✓	\checkmark			
Tropical Medicine and							
Gastroenterology							

Practical Skills (Patient Care)

Course	•	Program covered ILOs								
	2/3/1/A	2/3/1/B	2/3/1/C	2/3/1/D	2/3/1/E	2/3/1/F	2/3/1/G	2/3/1/H		
Course 1 :										
Microbiology										
and										
pharmacology										
course 2 :										
Parasitology and										
Public health										
course 3 :										
Pathology and										
Anatomy										
Course 4 :										
Physiology										
Course 5 :	✓	\checkmark	\checkmark	\checkmark	\checkmark	~	✓			
Internal Medicine										
Course 6: Clinical				\checkmark	\checkmark					
Pathology										
Course 7 :	~	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	✓	\checkmark		
Principals of										
Tropical Medicine										
and										
Gastroenterology										

Course	Program covered ILOs							
	2/3/ 2/A	2/3/ 2/B	2/3/ 2/C	2/3/ 2/D	2/3/ 2/E	2/3/ 2/F	2/3/ 2/G	2/3/ 2/H
Course 1 :				\checkmark				\checkmark
Microbiology and								
pharmacology								
course 2 :				\checkmark				\checkmark
Parasitology and								
Public health								
course 3 : Pathology				\checkmark				\checkmark
and Anatomy								
Course 4 : Physiology				\checkmark				✓
Course 5 : Internal	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Medicine								
Course 6: Clinical				\checkmark			\checkmark	
Pathology								
Course 7 : Principals	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
of Tropical Medicine								
and								
Gastroenterology								

General Skills

General Skills

Course	Program covered ILOs						
	2/3/2/I	2/3/2/J	2/3/2/K	2/3/2/L	2/3/2/M	2/3/2/N	2/3/2/0
Course 1 :			\checkmark		\checkmark		
Microbiology and							
pharmacology							
course 2 :			✓		\checkmark		
Parasitology and							
Public health							
course 3 :			\checkmark		\checkmark		
Pathology and							
Anatomy							
Course 4 :			\checkmark		\checkmark		
Physiology							
Course 5 : Internal	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Medicine							
Course 6: Clinical		\checkmark			\checkmark		
Pathology							
Course 7 : Principals	\checkmark	\checkmark	✓	\checkmark	\checkmark	✓	\checkmark
of Tropical Medicine							
and							
Gastroenterology							

Annex 7, Additional information:

Equipments and Specialized Units:

- Gastroenterology and Hepatology patients' wards: 48 beds.

- Fever and Infectious diseases wards: 30 beds.

- Hepatic intermediate care units (14 beds)

- Daily Gastroenterology out patients' clinic (new patients,

follow up post discharge appointments, discharged critical care patients Follow up clinic)

- Daily Hepatitis out patients' clinic (new patients, follow up post discharge appointments)

- Daily Fevers out patients' clinic (new patients, follow up post discharge appointments)

- Diagnostic, Interventional Ultrasonography Unit and colored Doppler ultrasound (2 units) (Liver biopsy, LN biopsy, liver and splenic aspirate, drainage of abscesses and cysts, Local ablation of hepatic tumor by ethanol, acetic acid and radiofrequency).

- Minor procedures skill teaching unit (paracentesis)

- Vaccination unit against viral hepatitis A and B.

- Diagnostic and therapeutic gastrointestinal endoscopy and ERCP Unit with share of other departments.

- Diagnostic laparoscopy unit.

Scientific Library (Gastroenterology, Hepatology and

Infections diseases Books and periodicals), MD, MSc thesis.

- Seminar room with data show

- Data base filing of all the cases, procedures and out patient clinic data.

Staff members

Prof. Abdel-Ghani Abdel-Hameed Soliman

Prof. Ahmed Medhat Nasar

Prof. Ahlam Mohamad Ahmed

Prof. Yousef Mohamad Swifee

Prof. Osman Abdel-Hameed Osman

Prof. Ashraf Mahmoud Osman

Prof. Mohamad El-Taher Abdel-Rahman

Prof. Saad Zaki Mahmoud

Prof. Madeha Mohamad El-Attar

Prof. Magda Shehata Hassan

Prof. Nadia Abdel-Salam Mohamad

Prof. Maha Tawfek M. Barakat

Prof. Sherif Ibrahim Kamel

Prof. Hanan Adawi Nafeh

Prof. Ahmad Helmy Salem (outbroard)

Prof. Lila Abel-Baky Mohamad

Prof. Ehab Fawzy Abdou

Prof: Soha Saoud

Prof. Nahed Ahmed Makhlouf

Dr.Abeer Sharaf ELden Abdel-Rheim

Prof. Elham Ahmed Hassan

Prof. Mohamed Omer

Prof. Saher Hassany

Prof. Mohamed Abdel-Sabour Mekky

Prof. Ahmad farouq

Dr. Zeinab Gaber

Dr. Mohamed Zakaria

Dr. Heidi Karam-allah

Dr. Adnan Ahmed

Dr. walid Attia Hassan

Dr .Ahmed Shawkat

Dr. Mohamed Ahmed Medhat

Dr. Khalid Abou Bakr

Dr. Rasha Hamed

Dr. Ahmed Mohamed Abou Elfattah

Dr. Abeer Esmat

Dr. Mohamed Abdel Ghani

Dr. Mohamed EZZ El Din

Dr. Noha Aly Masoud

Dr. Rasha Maree Dr. Marwa Abdel Razik

+ 21 Assistant Lecturers

Opportunities within the department

- Gastroenterology and Hepatology patients' wards: 48 beds.

- Fever and Infectious diseases wards: 30 beds.
- Hepatic intermediate care units (14 beds)
- Scientific Library
- Seminar room with data show
- Electronic Library of Scientific Seminars, case presentations.

- Data base filing of all the cases, procedures and outpatient clinic data.

Department quality control insurance for completing the program

- **4** Evaluation by the Department head and stuff members.
- Regular assessments.
- **4** Log book monitoring.
- **4** Recent equipments and Specialized Units.

(End of the program specifications)