كليه الطب جامعة أسوان
مستشفى أسوان الجامعى
قسم طب المناطق الحارة والجهاز الهضمى

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

(According to currently applied bylaws)

Tropical Medicine & Gastroenterology Department
Faculty of medicine
Aswan University
2019/2020

Contents

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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- Aswan University.
- **Program Academic Director (Head of the Department):** Pr. Dr. Ehab Fawzy Abdo
- **Coordinator (s):**

Principle coordinator: Dr. Mohamed El-Badry
Assistant coordinator (s) Dr / Mina Tharwat
Dr / Awny Abd El-Rahman

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 sub-specialist.

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) *for the whole program*:

2/1Knowledge and understanding:

A. Explain the essential facts and principles of relevant basic sciences including, Physiology, Biochemistry , Parasitology, Microbiology, Pathology , and Public Health related to Tropical Medicine and Gastroenterology.

B. Mention essential facts of clinically supportive sciences including Basics of Internal Medicine 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.

2/3 Skills

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.
D. Use information technology to support patient care 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.

4- Program External References

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

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 Tropical Medicine And Gastroenterology**	**University of Michigan Health System, Internal Medicine Clinical Fellowship Program**
Goals	Matched	Matched
ILOS	Matched	Matched
Duration	2-4 years	3 years
Requirement	Different	different
Program structure	Different	different

5. Program Structure and Contents

A. Duration of program: 2 years (maximum 4 years)

B. Structure of the program:

Total number of hours:

Didactic 910 (23.37%), practical 2984 (76.63%) total 3894

First part

Didactic 286 (36.95%), practical 488 (63.05%)total 774

Second part

Didactic 624, (20%) practical 2496 (80%) total 3120

According the currently applied bylaws:

Compulsory courses: 100%

Optional courses: N/A

Elective courses: N/A

	Hours	% from total
Basic courses	774	19.88%
Humanity and social courses	104	2.67%
Specialized courses	3120	80.12%
Others (Computer, …)	-	-
Field training	2808	72.11%

C. Program Time Table

A- **Duration of program** 2 -4 years divided into

- **Part 1: (30% from final marks)**

Program-related basic courses (one year)

Students are allowed to sit the exams of these courses after 12 months from applying to the master degree.

- **Part 2 (70% from final marks)**

  Minimum 2 years

Program –related academic and specialized science courses and ILOs

Students are not allowed to sit the exams of these courses before 2 years from applying to the master degree.

- **Part 3 (no marks)**

  Essay;

  Master essay duration: one year should be officially registered an approved by the department and faculty council,

  Discussion and acceptance of the essay should not be set before 12 months from registering the MSc subject.

  No marks are given to this section.

Practical and/or clinical skills according to training plan and log book specifications.

Minimum allocation for one year in the responsible department is required.

The students pass if they get 60% from the summative written exams and 60% from oral and clinical exams.

Total degrees 1000 marks.

300 m arks for first part
700 for second part
Written exam 40% (280 marks).
Clinical and oral exams 60% (420 marks)

D. Curriculum Structure: (Courses):

As mentioned above

Curriculum Structure: (Courses / units/ rotations):

Year 1

The first year of the fellowship is primarily for basic related science medical knowledge (studied in specialized courses over 6-12 months in collaboration with basic sciences departments of Aswan Faculty of Medicine) and a clinical year during which the fellows gain experience with a wide variety of patients in inpatient and outpatient settings, develop proficiency in the performance and appropriate utilization of various procedures, and develop proficiency in the utilization and interpretation of liver function. Throughout the year, emphasis is placed on developing: 1) an understanding of basic mechanisms and pathophysiology of GIT disease, liver diseases, infectious diseases and critical illness. 2) The ability to efficiently formulate clinical assessments and therapeutic plan for different GIT diseases. 3) The ability to critically analyze the relevant medical literature; and 4) skills in communicating with nursing and medical staff as well as house staff.

The first year fellow spends the year in Tropical Medicine department at Aswan University Hospital

Years 2

Although the primary focus of the second and third year is the development of skills and experience in research, senior fellows continue to participate in clinical activities and certain procedures. First, they maintain their longitudinal outpatient and inpatient clinic experience

throughout these years. Senior fellows will also actively participate in the regular weekly scientific seminars and collaborate with those fellows in their first year.

Approximately by the end of the first year, fellows are expected to identify a research area in which the subsequent two years will be focused. Together, the trainee and supervisors develop a project for investigation that is of interest to the trainee and within the expertise of the faculty member; in certain instances, joint mentorship provided by two faculty members within the Division, or by one divisional faculty member and a collaborator from another unit, is appropriate. By the beginning of the second year, the fellow presents a conference in which he/she synthesizes existing knowledge, presents the problem for investigation, and describes the proposed plan of investigation. The faculty members and fellows in attendance provide feedback to the fellow and supervisors about the proposed project; this process of peer review provides a useful experience for the fellow and often strengthens the experimental approach.

During the second and third years, the trainee carries out the proposed work in the clinical research facilities of the faculty mentor(s). The trainee also benefits from interactions with other trainees, technicians, and collaborating investigators. The trainee also participates in laboratory meetings and journal clubs specific to individual research groups. Presenting research findings at regional and national meetings and submitting work for publication are both important aspects of the investigative endeavor. The trainee will receive guidance and specific assistance in learning to prepare data for oral and written presentation, to prepare graphics, and to organize talks and prepare slides. Throughout the two-year research training period, it is anticipated that the

fellow will assume increasing intellectual responsibility and technical independence.

Research (Essay) Pathway

Selection of a research project and supervisors is subject to the approval of the Tropical Medicine Department council approval and vice-Dean of post graduate studies of the faculty as officially regulated. Fellows may elect either clinically or epidemiologically -based research training pathways. For all Master degree students, a research advisory committee will be selected by the fellow based on the approved regulatory rules of the faculty council. This committee will monitor the progress of research fellows and provide advice regarding research training and career development

courses of the program:

Modules/ Units delivering courses and student work load list	Course Code	Lectures	Training	total
First Part				
Basic Courses				
1. Course 1				
Unit (Module) 1 (Microbiology)	**GIT223A#**	39	26	65
Unit (Module) 2 (Parasitology)		39	26	65
2. Course 2	**GIT223B#**			
Unit (Module) 1 (Physiology)		26	-	26
Unit (Module) 2 (Biochemistry)		26	-	26
3. Course 3 (Pathology)	**GIT205**	52	72	124
4. Course 4 (Public Health)	**GIT209**	52	52	104
5.Course 5 (Internal Medicine)	**GIT218**	52	312	364

Total of first part		286	488	774
Second Part	**Specialized courses Specialized Clinical Work (log Book)**			
1) Course 6 Tropical Medicine and Gastroenterology*	**GIT223C**	624	2496	3120
Third Part Essay				
Total of second part		**624**	**2496**	**3120**

***Tropical Medicine and Gastroenterology Course**

Units' Titles' list	% from total Marks	Hours		
		Lectures	training	total
1) Unit (Module) 1 Gastroenterology	30%	187	748	935
2) Unit (Module) 2 Hepatology	30%	188	752	940
3) Unit (Module) 3 Infectious Diseases	30%	187	748	935
4) Unit (Module) 4 Nutrition	5%	31	124	155
5) Unit (Module) 5 Hematology	5%	31	124	155
Total No. of Units (5 Modules):	100%	624	**2496**	**3120**

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.

<u>See Annex 1 for detailed specifications for each course/ module</u>

7-Admission requirements

- **Admission Requirements (prerequisites) if any :**
  - **I. General Requirements:**
    - Grade good in the final exam from approved faculty of Medicine (except for students from abroad)
    - Completed his intern year after graduation from medical school
    - One year appointment within responsible department (for non Aswan University based registrars)
  - **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 applying to the master degree.
- Examination of the second part cannot be set before 2 years from applying to the degree.
- Discussion of the master essay could be set after 1 year from officially registering the subject.
- The minimum duration of the program is 2 years.

The students are offered the degree when:

1. Passing the exams of all basic and specialized courses of this program as regulated by the post graduates approved rules by the faculty council.
2. Completing all scheduled skills in the log book (minimum 80%).
3. Discussion and acceptance of the essay.

9- Program assessment methods and rules (Annex IV)

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

Weighting of assessments:

Courses		Degrees			
First Part	**Course Code**	**Written Exam**	**Oral Exam**	**Practical / Clinical Exam**	**Total**
Basic Courses:					
Course 1 Unit (Module) 1 (Microbiology) Unit (Module) 2 (Parasitology)	GIT223A#	 15 15	 15 15		 **30** **30**
Course 2 Unit (Module) 1 (Physiology) Unit (Module) 2 (Biochemistry)	GIT223B#	 15 15	 15 15		 **30** **30**
Course 3 (Pathology)	GIT205	30	30		60
Course 4(Public Health)	GIT209	30	30		60
Course 5(Internal Medicine)	GIT218	30	30		60
Total		**150**	**150**		**300**
Second Part					
Specialized Courses:					
1) Course 6 Tropical Medicine and Gastroenterology Paper 1 Paper2	CHT223C	 140 140	 120	Practical 100 Clinical 200	
Total of second part		280	120	300	700

<u>300 marks for first part</u> (Calculated from the marks of the first part)

<u>700 for second part</u>

Written exam 40% (280 marks).

Clinical and oral exams 60% (420 marks)

- **Examination system:**
  - **First part:**
    - Written exam 3 hours in Microbiology and Parasitology + Oral exam including assessment of practical skills
    - Written exam 3 hours in Physiology and Biochemistry + Oral exam
    - Written exam 3 hours in Pathology + Oral exam including assessment of practical skills
    - Written exam 3 hours in Public Health + Oral exam including assessment of practical skills
    - Written exam 3 hours in Internal Medicine + Oral exam+ Clinical exam
  - **Second part:**
    - Written exam Two papers 3 hours for each in Tropical Medicine and gastroenterology + Oral exam+ Clinical exam

10-Program evaluation

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

#Annex 5 contains evaluation templates and reports.

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. Ehab Fawzy Abdo		
Head of the Responsible Department (Program	Dr. Mohamed El-Badry		

Academic Director):			

Annex 1, Specifications for Courses / Modules

Annex 1: specifications for courses/

First Part

Course 1 Unit (Module) 1 (Microbiology)

Name of department: Tropical Medicine and Gastroenterology
Faculty of medicine
Aswan University
2019/2020

1. Unit data

- **Course Title: Microbiology**
- **Unit code: GIT223A#**
- **Specialty: Tropical Medicine and gastroenterology.**
- **Number of hours Didactic 39, (60%) practical 26 (40%) total 65.**
- **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
- **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. Intending 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	-Lectures -Laboratory work	-Written and oral examination

- 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 - Immunogenetics and transplantation immunology General virology - Interferon and antiviral agents Sterilization PUO Water born infection and milk born infection Blood transmitted infection.		-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

ILOs	Methods of teaching/ learning	Methods of Evaluation

A-Master the basic skills in the Microbiology of tropical medicine and gastroenterology.	Laboratory work	-Assessment of practical skills -Logbook
B-Use information technology to support decisions related to Microbiology of tropical medicine and gastroenterology.		
C. Identify pathogens of common gastrointestinal and tropical infection by examining slides under the microscope.		

D-General Skills

Practice-Based Learning and Improvement

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

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	Log book

	communication	
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 experience	Logbook

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 experience	Logbook

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&B	A-E
Bacterial genetics	A	A	A&B	A-E
Antimicrobial agents and resistance to antimicrobials.	A	A	A&B	A-E
Specific microorganisms and diseases as Salmonella and other gram negative organisms, Tuberculosis, brucellosis, Staphylococci and streptococci	A	A	A-C	A-E
Immunology				
Basic immunology	A	A	A&B	A-E
Immunologic diagnostic test and serology	A		A&B	A-E
Tumor	A	A	A&B	A-E

immunology				
Immunogenetics and transplantation immunology	A	A	A&B	A-E
General virology				
- Interferon and antiviral agents	A	A	A&B	A-E
Sterilization	A	A	A&B	A-E
PUO	A	A	A&B	A-E
Water born infection and milk born infection	A	A	A-C	A-E
Blood transmitted infection.	A	A	A-C	A-E

5. Course Methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Laboratory work
3. Observation and supervision
4. Written & oral communication
5. 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- Assessment of practical skills)
3- Log book

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

iii. Marks: 30

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 (Parasitology)

1. Unit data

- **Unit Title: Parasitology**
- **Course code: GIT223A#**
- **Specialty :is Tropical Medicine and gastroenterology.**
- **Number of hours Didactic 39, (60%) practical 26 (40%) total 65.**
- **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**
- **Requirements (prerequisites) if any :**
- **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. Intending learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Describe Principles of parasitology including: -Helminthic infestations (details) -Protozoal infestations -Clinical Parasitology -Basic Knowledge in clinical Parasitology -Insects (Brief)	-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 Parasitology 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

ILOs	Methods of teaching/	Methods of Evaluation

	learning	
A- Master the basic skills in the Parasitology of tropical medicine and gastroenterology.	Laboratory work	-Assessment of practical skills -Logbook
B-Use information technology to support decisions related to Parasitology of tropical medicine and gastroenterology.		
C. Identify common parasites of gastrointestinal tract and Liver by examining eggs and larvae under the microscope.		

D-General Skills

Practice-Based Learning and Improvement

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

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 experience	Logbook

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 experience	Logbook

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
Helminthic infestations	A	A	A-C	A-E

(details)				
-Protozoal infestations	A	A	A-C	A-E
-Clinical Parasitology	A	A	A & B	A-E
-Basic Knowledge in clinical Parasitology	A	A	A &B	A-E
Insects (Brief)	A	A	A & B	A-E

5. Course Methods of teaching/learning:

1 Didactic (lectures, seminars, tutorial)
2 Laboratory work
3 Observation and supervision
4 Written & oral communication
5 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:

4- Written and oral examination
5- Assessment of practical skills)
6- Log book

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

iii. Marks: 30

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

Name of department: Tropical Medicine and Gastroenterology
Faculty of medicine
Aswan University
2019/2020

Course 2 Unit (Module)1 (Physiology)

1. Unit data

- **Unit Title: Physiology**

- **Unit code: GIT223B#**

- **Specialty is Tropical Medicine and Gastroenterology**
- **Number of hours Didactic 26, (100%) practical 0 (0%) total 26.**
- **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**
- **Requirements (prerequisites) if any :**
- **None**

2. Unit Aims

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

3. Intending learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Mention Physiologic Principles of GIT and liver including:	-Lectures	-Written and oral

-GIT secretion and hormones -Digestion and absorption -Acid base balance -Autonomic nervous system		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/ learning	Methods of Evaluation
A. Correlates the facts of Physiology 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

Practical: 0 hours

D- General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation

A. Perform data management including data entry and analysis.	-Observation and supervision -Written and oral communication	Log book

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 experience	Logbook

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 experience	Logbook

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
GIT secretion and hormones	A	A&B	-	A-E
-Digestion and absorption	A	A&B	-	A-E
-Acid base balance	A	A&B	-	A-E
-Autonomic nervous system	A	A&B	-	A-E
Blood	B	A&B	-	A-E
-Physiology of swallowing and defecation	B	A&B	-	A-E
-Regulation of body temperature	B	A&B	-	A-E

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: 30

8. List of references

i. Lectures notes

- Staff members print out of lectures and/or CD copies
- Medical physiology books by Staff Members of the Department of Medical physiology -Aswan University.

ii. Essential books

- Guyton AC, Hall JE: Textbook of Medical Physiology, 11th ed. Saunders, 2006.

iii. Recommended books

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

iv. Periodicals, Web sites, … etc

- Journal of applied physiology.
- American J of Gastroenterology

Course 2 Unit (Module) 2(Biochemistry)

1. Unit data

- **Unit: Biochemistry**
- **Course code: GIT223B#**
- **Specialty : Tropical Medicine and Gastroenterology**
- **Number of hours Didactic 26, (100%) practical 0 (0%) total 26.**
- **Department (s) delivering the course: Biochemistry in conjunction with Tropical Medicine department.**

- **Coordinator (s): Staff members of Biochemistry Department in conjunction with Tropical Medicine Department as annually approved by both departments councils**
- **Requirements (prerequisites) if any :**
- **None**

2. Unit Aims

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

3. Intending learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	**Methods of teaching/ learning**	***Methods of Evaluation***
A. Mention *principles of Biochemistry of:* - Aflatoxins - Urea cycle - Oxidants and antioxidants.	-Lectures	-Written and oral examination - Log book
B. Describe *details of Biochemistry of:* - Metabolism of Proteins, Lipids, and carbohydrates - Bilirubin biochemistry		

B- Intellectual outcomes

ILOs	**Methods of teaching/ learning**	**Methods of Evaluation**

A. Correlates the facts of *Biochemistry* 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

Practical: 0 hours

D- General Skills

Practice-Based Learning and Improvement

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

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 experience	Logbook

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 experience	Logbook

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
-Aflatoxins	A	A	-	A-E
-Urea cycle	A	A	-	A-E
-Oxidants and antioxidants	A	A	-	A-E
- Metabolism of Proteins, Lipids, and carbohydrates	B	A	-	A-E
-Bilirubin biochemistry	B	A	-	A-E

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: 30

8. List of references

i. Lectures notes

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

ii. Essential books

- Harper's Illustrated Biochemistry, 28th Edition
- Diseases of the liver and Biliary System (Sheila Sherlock and James Dooley)

iii. Recommended books

- Lippincott's Illustrated Reviews: Biochemistry, Fourth Edition

iv. Periodicals, Web sites, … etc

- Biochemistry and molecular biology education journal.
- American J of Gastroenterology
- Gut
- Hepatology
- J of Infectious diseases

v. others

None

Course 3 (Pathology)

Name of department: Tropical Medicine and Gastroenterology

Faculty of medicine
Aswan University
2019/2020

1. Course data

- **Course Title: Pathology**
- **Course code: GIT205**
- **Specialty is *Tropical Medicine and Gastroenterology***
- **Number of hours Didactic 52, (41.94%) practical 72 (58.06%), total 124.**
- **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**
- **Requirements (prerequisites) if any :**
- **None**

2. Course aims

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

3. Intending learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Mention Principles of General Pathology of: - Immunity. - Bacterial infection. - Pathology of tumors - Diagnostic cytology.	-Lectures	-Written and oral examination - Log book
B-Describe Pathologic Details of: -Liver and GIT -Acute viral hepatitis -Chronic hepatitis -Autoimmune hepatitis -Hepatocellular carcinoma -Other hepatic tumors		

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of 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

C- Practical skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
A- Master the basic skills in the Pathology of tropical medicine and gastroenterology.	Laboratory work	-Assessment of practical skills -Logbook
B-Use information technology to support decisions related to pathology of tropical medicine and gastroenterology.		
B. Examine Pathological slides of common Tropical and Gastrointestinal diseases.		

D-General Skills

Practice-Based Learning and Improvement

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

	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 and A.B		

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 experience	Logbook

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 experience	Logbook

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
Principles of General Pathology of:				
- Immunity.	A	A	A&B	A-E
- Bacterial infection.	A	A	A&B	A-E
- Pathology of tumors	A	A	A-C	A-E
- Diagnostic cytology.	A	A	A-C	A-E
Pathologic Details of:				
-Liver and GIT	B	A	A-C	A-E
-Acute viral hepatitis	B	A	A-C	A-E
-Chronic hepatitis	B	A	A-C	A-E
-Autoimmune hepatitis	B	A	A-C	A-E
-Hepatocellular carcinoma	B	A	A-C	A-E
-Other hepatic tumors	B	A	A-C	A-E

5. Course Methods of teaching/learning:

1 Didactic (lectures, seminars, tutorial)
2 Laboratory work
3 Observation and supervision
4 Written & oral communication

5 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. Assessment of practical skills)
3. Log book

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

iii. Marks: 60

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 4 (Module) Public Health

Name of department: Tropical Medicine and Gastroenterology
Faculty of medicine
Aswan University
2019/2020

1. Course data

- **Course Title: Public Health**
- **Course code: GIT209**
- **Specialty is Tropical Medicine and Gastroenterology**

- **Number of hours Didactic 104, (50 %) practical 104 (50 %), total 208 .**
- **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

- **Requirements (prerequisites) if any :**
- **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 (MOH).

3. Intending learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*

A. *Describe* Principles of epidemiology of: -Vaccination - Epidemiology of Tropical communicable and non communicable diseases -Medical statistics	-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

B- 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

C- Practical skills

ILOs	Methods of	Methods of

	teaching/ learning	Evaluation
A- Master the basic skills in the Public health related to tropical medicine and gastroenterology.	Computer LAB	Assessment of practical skills -Logbook
B-Use information technology to support decisions related to Public health in Tropical medicine and gastroenterology.	Computer LAB	Assessment of practical skills -Logbook
C-Perform Medical Statistics	Computer LAB	Assessment of practical skills -Logbook

D-General Skills

Practice-Based Learning and Improvement

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

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 experience	Logbook

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 experience	Logbook

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**
Describe Principles of epidemiology of:				
-Vaccination	A	B	A-C	A-E
- Epidemiology of Tropical communicable and non communicable diseases	A	A & B	A-C	A-E
-Medical statistics	A	A	C	A-E
Describe details epidemiology of:				
-Selected communicable diseases as Viral Hepatitis	B	A & B	A-C	A-E
-Nosocomial Infection	B	A & B	A-C	A-E

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

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- Assessment of practical skills)
3- Log book

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

iii. Marks: 60

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

- None

Course 5 Internal Medicine

Name of department: Tropical Medicine and Gastroenterology
Faculty of medicine
Aswan University
2019/2020

1. Course data

- **Course Title: Internal Medicine**
- **Course code: GIT218**
- **Specialty is Tropical Medicine and Gastroenterology**
- **Number of hours Didactic 52, (14.3 %) practical 312 (85.7 %), total 364.**
- **Department (s) delivering the course: Internal Medicine**
- **Coordinator (s): Staff members of Internal Medicine Department as annually approved by department councils**
- **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. Intending learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
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- Valvular heart diseases d-Infective endocarditis e- Hypertension 2- Nephrology a-Renal failure b-Nephritis c- Nephrotic syndrome	-Didactic (lectures, seminars, tutorial) -Case presentation	- Written and oral examination - Log book

3-Haematology a- Lymphomas b- Coagulation disorders d-Anemia 4-Neurological diseases a- Nutritional neuropathy b- Diabetic Neuropathy 5- Endocrinology a- Diabetes mellitus b- Thyroid diseases c- Adrenal gland diseases d- Obesity 6-Collagen vascular and systemic diseases		
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/ 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 Internal Medicine.	-Clinical rounds Senior staff experience	-Logbook and Portfolios -Procedure and 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 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 -log book & portfolio -Clinical exam in internal medicine

B. Order the following non invasive/invasive diagnostic procedures: -Routine appropriate Lab investigations related to conditions mentioned in A.A -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.	-Clinical round with senior staff Observation -Post graduate teaching	-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 -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.	Clinical round with senior staff	Procedure presentation - Log book - Chick list
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 teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology(audit, logbook)	-Case log -Observation and supervision -Written & oral communication	Procedure/case presentation -Log book and Portfolios
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.	Clinical rounds 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.		
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 Internal Medicine.	Clinical round Seminars	Clinical Exam
K. Write a report : ECG report.	Senior staff experience	Chick list

L. Council patients and families about: Conditions mentioned above 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	Observation Senior staff experience Case taking	1. Objective structured clinical examination 2. 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		1. Objective structured clinical examination 2. 360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation

P. Work effectively in relevant health care delivery settings and systems.	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. 360o global rating 2. Patient survey

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
1 Cardiology				
a-Heart failure	A	A-D	A-I	A-R
b-Rheumatic fever	A	A-D	A-I	A-R
c- Valvular heart diseases	A	A-D	A-I	A-R
d-Infective endocarditis	A	A-D	A-I	A-R
e-Hypertension	A & C		A-I	A-R

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	A	A-D	A-I	A-R
b-Coagulation disorders	A & C	A-D	A-I	A-R
c-Anemia	A	A-D	A-I	A-R
4 Neurological diseases				
a-Nutritional neuropathy	A	A-D	A-I	A-R
b- Diabetic Neuropathy	A	A-D	A-I	A-R
		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
d- Obesity	A	A-D	A-I	A-R
e- Diabetes mellitus	A & C	A-D	A-I	A-R
6- Collagen vascular and systemic diseases	A	A-D	A-I	A-R
Basics of Internal Medicine	B	A	-	-

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. 360o global rating

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

iii. Marks: 60

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

Second Part

Course 6 Tropical Medicine and Gastroenterology

Name of department: Tropical Medicine and Gastroenterology
Faculty of medicine
Aswan University
2019/2020

1. Course data

- **Course Title: *Tropical Medicine and Gastroenterology.***
- **Course code: GIT223C**
- **Specialty *:Tropical Medicine and Gastroenterology.***

Number of hours: Didactic 624**, (20%) practical** 2496 **(80%) total** 3120

- **Department (s) delivering the course:** Department of ***Tropical Medicine and Gastroenterology*** - Faculty of Medicine- Aswan University.
- **Coordinator (s):**
  Principal Co-ordinator : Pr. Dr. Ehab Fawzy Abdo

Assistant coordinator (s) Pr. Dr. Mohamed El-Badry

- **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 5 Units (Modules)

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

Time schedule for this course

12 hours / week for Basic knowledge and lectures for 52 weeks
(24 hours/ week for clinical cases training for 52 weeks)x 2

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 sub-specialist.
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 intending learning outcomes (ILOs):

Unit 1 Hepatology

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
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 - Hepatic coma - Liver cell failure - Ascites -NAFLD(Fatty liver and NASH and insulin resistance) -Spontaneous Bacterial peritonitis -Hepatorenal syndrome - Hepatic encephalopathy -Primary Malignant tumors -Secondary Malignant tumors - Benign Liver tumors -Liver abscesses - Cholecystitis (Acute & chronic) -Autoimmune hepatitis -Fulminant Hepatitis - Primary biliary cirrhosis	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

- Budd – chiari syndrome -Metabolic liver diseases -Hereditary Liver disease -Alcoholic liver diseases -Hepatopulmonary syndrome -Drug induced liver disease		
B. Mention the principles of : -Jaundice and Cholestasis - 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		
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 of Hepatology on the society and how good clinical pr improve these problems.		

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 Hepatology.	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 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 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 Lab investigations related to conditions mentioned in A.A -X ray abdomen. -Abdominal Ultrasonography -CT abdomen -liver function testing -Upper and lower endoscopy.	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 -Liver function tests. -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. -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/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (share in audit and risk management activities and use logbook).	-Case log -Observation and supervision -Written & oral communication	Procedure/case presentation -Log book and Portfolios
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 health care professionals including their evaluation and assessment.	Clinical rounds Senior staff 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 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

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	1. Objective structured clinical examination 2. 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		1. Objective structured clinical examination 2. 360o 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. 360o global rating 2. Patient survey

Unit 2 Gastroenterology

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: <u>Common:</u> -GERD -Oesophageal tumors -Gastritis - Peptic ulcer -Irritable bowel syndrome -Intestinal tuberculosis -Tuberculous peritonitis <u>Less common</u> -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 -Acute pancreatitis -Chronic pancreatitis	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

-Carcinoma of the pancreas -Endocrinal tumors of the pancreas		
B. Mention the principles of : <u>Common</u> - Gastrointestinal bleeding -Vomiting -Dysphagia -Abdominal pain and Post-cholecystectomy syndrome -Diarrhea (Acute and chronic) -Constipation -Dysentery (Acute, chronic) <u>Less common</u> -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 pra improve these problems.		

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 Gastroenterology.	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 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)

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 Lab investigations related to conditions mentioned in A.A -X ray abdomen. -Abdominal Ultrasonography -CT abdomen -Upper and lower endoscopy.	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. -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	Procedure presentation - 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 teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (share in audit and risk management activities and use	-Case log -Observation and	Procedure/case presentation -Log book and

logbook).	supervision -Written & oral communication	Portfolios
B. Appraises evidence from scientific studies(journal club)	-Journal clubs - 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 health care professionals including their evaluation and assessment.	Clinical rounds Senior staff 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 Portfolios Chick list and

	Hand on workshops	
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	1. Objective structured clinical

	Case taking	examination 2. 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		1. Objective structured clinical examination 2. 360o 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. 360o global rating 2. Patient survey

Unit (Module) 3 Infectious Diseases

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of 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 Brucellosis E coli Infectious diarrhea Entero-colitides Food poisoning	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

Pseudo membranous colitis Tuberculosis H. pylori infection Pneumonia Rheumatic Fever Infective Endocarditis Staphylococcal Infections Streptococcal infection Bacterial Meningitis Meningococcal Infections Leptospirosis Liver abscess *Viral diseases* HIV infection Infectious mononucleosis Cytomegalovirus Viral gastroenteritis Influenza Severe Acute Respiratory Syndrome (SARS) **Parasitic disease** Schistosomiasis Amebiasis Giardiasis Parasitic disease of the liver Malaria Leishmaniasis Toxoplasmosis 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 Fevers associated with sweating -Hospital acquired infection -Traveler diarrhea -Viral like agents -Fungal diseases Zoonoses -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 pr improve these problems.		

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 Infectious Diseases .	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 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	Clinical round with senior staff Observation Post	-Procedure presentation - Log book - Chick list

-Urine analysis -Stool analysis -CBC, Blood film -Liver function tests -X ray abdomen - Abdominal Ultrasonography -CT abdomen - Upper and lower endoscopies - Echo	graduate teaching Hand on workshops	
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/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (share in audit and risk management activities and use logbook).	-Case log -Observation and supervision -Written & oral communication	Procedure/case presentation -Log book and Portfolios
B. Appraises evidence from scientific studies(journal club)	-Journal clubs - 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 health care professionals including their evaluation and assessment.	Clinical rounds Senior staff 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	Observation Senior staff experience Case taking	1. Objective structured clinical examination 2. 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		1. Objective structured clinical examination 2. 360o 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. 360o global rating 2. Patient survey

Unit (Module) 4 Nutrition

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*

A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: -Water-soluble vitamins deficiency -Fat-soluble vitamins deficiency	Didactic; Lectures Clinical rounds	-log book - one MCQ examination at the second year -Oral and written exam
B. Mention the principles of : -Assessment of Malnutrition -Nutrition in liver diseases -Nutrition in celiac disease.		
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 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

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 malnutrition.	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 malnutrition.		
D. 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)

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	-log book - One MCQ examination at the second half of the second year

	(service teaching)	
B. Order the following non invasive/invasive diagnostic procedures -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	-Clinical round with senior staff Observation Post graduate teaching	- Log book - Chick list
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.	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 teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (share in audit and risk management activities and use logbook).	-Case log -Observation and supervision -Written & oral communication	Procedure/case presentation -Log book and Portfolios
B. Appraises evidence from scientific studies(journal club)	-Journal clubs - 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 health care professionals including their evaluation and assessment.	Clinical rounds Senior staff 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	Senior staff experience	Chick list

-Death report		
L. Council patients and families about: -Malnutrition -Nutrition 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	1. Objective structured clinical examination 2. 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		1. Objective structured clinical examination 2. 360o 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. 360o global rating 2. Patient survey

Unit (Module) 5 Hematology

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of 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 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

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 Hematology.	-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 Hematology.		
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 Hematology.		
D-Formulate management plans and alternative decisions in different situations in the field of the Hematology.		

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 -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 - Abdominal Ultrasonography -CT abdomen - Upper and lower endoscopies.	Clinical round with senior staff Observation Post graduate teaching	-Procedure presentation - Log book - 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

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (share in audit and risk management activities and use logbook).	-Case log -Observation and supervision -Written & oral communication	Procedure/case presentation -Log book and Portfolios
B. Appraises evidence from scientific studies(journal club)	-Journal clubs - 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 health care professionals including their evaluation and assessment.	Clinical rounds Senior staff 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 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 Hematology.	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: -Anemia in liver disease. - Hazards of blood transfusion	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	1. Objective structured clinical examination 2. 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		1. Objective structured clinical examination 2. 360o 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. 360o global rating 2. Patient survey

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

Time Schedule: Second part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
Unit 1 Hepatology				
Acute viral hepatitis (A,B.C,D ,E)	A,C-H	A-D	A-J	A-L, M-R
Chronic hepatitis	A,C-H	A-D	A-J	A-L, M-R
Liver cirrhosis and its complications	A,C-H	A-D	A-J	A-K, M-R
Hepatic coma	A,D-H	A-D	A-J	A-K, M-R
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 and insulin resistance)	A,C-H	A-D	A-J	A-K, M-R
Spontaneous Bacterial peritonitis	A,C-H	A-D	A-J	A-K, M-R
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 & chronic)	A,D-H	A-D	A-J	A-K, M-R
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	B	A-D	A-J	A-K, M-R
Liver diseases in pregnancy	B	A-D	A-J	A-K, M-R
Liver diseases in elderly	B	A-D	A-J	A-K, M-R
Liver in systemic diseases	B	A-D	A-J	A-K, M-R
Hepatosplenomegaly	B	A-D	A-J	A-K, M-R
Portal hypertension	B,C	A-D	A-J	A-K, M-R
Gall stones	B	A	A-J	A-K, M-R
Abdominal US (Diagnostic and Interventional)	B	A	A-J	K
Assessment of surgical risk in liver cirrhosis	B	A	A-J	A-K, M-R
liver and heart	B	A-D	A-J	A-K, M-R
Liver and kidney	B	A-D	A-J	A-K, M-R
Liver and lung	B	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.	B	A, D	A-J	A-K, M-R
Liver biopsy.	B	A	D	K

-Guidelines in management of chronic hepatitis B and C).	A,C-H	D	E-G,I,J	A-K, M-R
- Guidelines in management of Portal hypertension	B,C-H	D	E-G,I,J	A-K, M-R
Unit 2 Gastroenterology				
-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	A,C-H	A-D	A-G,I	A-R
- Peptic ulcer	A, C-H	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-obstruction	A,D-H	A-D	A-G,I,J	A-K, M-R
-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 colon	A,D-H	A-D	A-G,I,J	A-K, M-R
-Small bowel tumors	A,D-H	A-D	A-J	A-R
-Colonic tumors and screening of colorectal cancer.	A,D-H	A-D	A-I	A-R
-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 pancreas	A,D-H	A-D	A-J	A-R
- Gastrointestinal bleeding	B,C-H	A-D	A-J	A-K, M-R
-Vomiting	B, D-H	A-D	A-J	A-K, M-R
-Dysphagia	B, D-H	A-D	A-J	A-K, M-R
-Abdominal pain and Post-cholecystectomy syndrome	B, D-H	A-D	A-J	A-K, M-R
-Diarrhea (Acute and chronic)	B, D-H	A-D	A-J	A-K, M-R
-Constipation	B, D-H	A-D	A-J	A-K, M-R
-Dysentery (Acute, chronic)	B, D-H	A-D	A-J	A-K, M-R
-Caustic injury	B, D-H	A-D	A-J	A-K, M-R
– foreign body	B, D-H	A-D	A-J	A-K, M-R
-Motility disorder	B, D-H	A-D	A-J	A-K, M-R
-Intestinal parasites	B, D-H	A-D	A-J	A-K, M-R
-Intestinal ischemia	B, D-H	A-D	A-J	A-K, M-R
-Vascular malformation of the GIT	B, D-H	A-D	A-J	A-K, M-R
-Gastrointestinal polyposis	B, D-H	A-D	A-J	A-R
- Malabsorption	B, D-H	A-D	A-J	A-K, M-R
-Protein losing enteropathy	B, D-H	A-D	A-J	A-K, M-R
-Drug induced damage of the Gastrointestinal tract	B, D-H	A-D	A-J	A-K, M-R
-Drugs for peptic ulcers	B, C-H	A-D	A-G,I,J	A-K, M-R
-Drugs for GIT bleeding	B, C-H	A-D	A-G,I,J	A-K, M-R
-Endoscopy in Gastrointestinal tract.	B	A	B-C	A-I, M-R
-Radiology in Gastrointestinal tract.	B	A	B-C	A-I, M-R
Unit 3 Infection				
Bacterial infections				
Typhoid fever	A,C-H	A-D	A-J	A-R
Salmonella infection other than typhoid	A,C-H	A-D	A-J	A-R
Shigellosis	A,C-H	A-D	A-J	A-R

Brucellosis	A,C-H	A-D	A-J	A-R
E coli	A,D-H	A-D	A-J	A-R
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	A,C-H	A-D	A-J	A-R
Tuberculosis	A,C-H	A-D	A-J	A-R
H. pylori infection	A,D-H		A-J	A-R
Pneumonia	A,C-H	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	A,C-H	A-D	A-J	A-R
Meningococcal Infections	A,C-H	A-D	A-J	A-R
Leptospirosis	A,D-H		A-J	A-R
Liver abscess	A,C-H	A-D	A-J	A-R
Viral diseases				
HIV infection	A,C-H	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
Viral gastroenteritis	A,D-H	A-D	A-J	A-R
Influenza	A,C-H	A-D	A-J	A-R
Severe Acute Respiratory Syndrome (SARS)	A,C-H		A-J	A-R
Parasitic disease				
Schistosomiasis	A,D-H	A-D	A-J	A-R
Amebiasis	A,D-H	A-D	A-J	A-R
Giardiasis	A,D-H		A-J	A-R
Parasitic disease of the liver	A,D-H	A-D	A-J	A-R
Malaria	A,D-H	A-D	A-J	A-R
Leishmaniasis	A,D-H	A-D	A-J	A-R

Toxoplasmosis	A,D-H		A-J	A-R
Cryptosporidiosis	A,D-H	A-D	A-J	A-R
Others				
-Pyrexia of unknown origin(PUO)	B	A-D	A-G,I,J	A-R
Fever with jaundice	B		A-G,I,J	A-R
Fever with sore throat	B	A-D	A-G,I,J	A-R
Fever with rigors	B	A-D	A-G,I,J	A-R
Fever with splenomegaly	B	A-D	A-G,I,J	A-R
Fever with hepatomegaly	B		A-G,I,J	A-R
Fever with lymphadenopathy	B	A-D	A-G,I,J	A-R
Fevers associated with sweating	B	A-D	A-G,I,J	A-R
Hospital acquired infection	B	A-D	A-I	A-R
-Traveler diarrhea	B		A-J	A-R
-Viral like agents	B	A-D	A-G,I,J	A-R
-Fungal diseases	B	A-D	A-G,I,J	A-R
Zoonoses	B	A-D	A-G,I,J	A-R
-Pathogenesis of pyrexia	B	A	A-G,I,J	A-R
-Regulation of body temperature	B	A	A-G,I,J	A-R
-Heat introduced disorders	B	A-D	A-G,I,J	A-R
- Antimicrobial Chemotherapy and their principals of use.	B	A,D	E,F,G	A-R
-Antiparasitic Chemotherapy	B	A,D	E,F,G	A-R
-Chemoprophylaxis	B	A,D	E,F,G	A-R

- Antimicrobial resistance	B	A,D	E,F,G	A-R
-Antiviral drugs	B	A,D	E,F,G	A-R
Antifungal drugs	B	A,D	E,F,G	A-R
Unit 4 nutrition				
Water-soluble vitamins deficiency	A,D-H	A-D	A-J	A-K,M-R
-Fat-soluble vitamins deficiency	A, D-H	A-D	A-J	A-K,M-R
Assessment of Malnutrition	B,C-H	A-D	A-J	A-R
-Nutrition in liver diseases	B,C-H	A-D	A-J	A-K,M-R
-Nutrition in celiac disease.	B,D-H	A-D	A-J	A-R
Unit 5 Hematology				
-Anemias in tropics	A,C-H	A-D	A-J	A-R
-Myloproliferative and lymphoproliferative disorders.	A,C-H	A-D	A-J	A-R
-Hematological changes in liver diseases	B,D-H	A-D	A-G,I,J	A-R
Blood transfusion.	B,D-H	A-D	E,F,G,I,J	L, M-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: 700

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.
- Cecil Textbook of Medicine; McGraw Hill; 16th edition, 2007.

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.

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:** ……
Date: ……	**Date:** ……

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 specialty.

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 specialty.

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 specialty 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.

- ***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**	**Interpersonal and communication skills**	**Professionalism**	**Systems-based practice**
Didactic (lectures, seminars, tutorial)	X	X		X	X	X
journal club,	X	X	X			
Educational prescription	X	X	X	X	X	X
Present a case (true or simulated) in a grand round	X	X	X	X	X	
Observation and supervision	X		X	X	X	X

conferences		X	X	X		X
Written assignments	X	X	X	X	X	X
Oral assignments	X	X	X	X	X	X

<u>Teaching methods for knowledge</u>

- ❖ 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

<u>Teaching methods for patient care</u>

- ❖ 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.

<u>Teaching methods for other skills</u>

- 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 Skills	K	Intellectual	General skills			
	Patient Care	K	I	Practice-based learning/ Improvement	Interpersonal and communication skills	Professionalism	Systems-based practice
Record review	X	X	X		X	X	X
Checklist	X				X		
Global rating	X	X	X	X	X	X	X
Simulations	X	X	X	X	X	X	
Portfolios	X	X	X	X	X		
Standardized oral examination	X	X	X	X	X		X
Written examination	X	X	X	X			X

Procedure/ case log	X	X					
OSCE	X	X	X	X	X	X	X

Annex 4, Glossary of Master Degree doctors assessment methods

- 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 decision-making.

- 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 Unit	Reports Field visits	#
External Evaluator (s):According to department council External Examiner (s): According to department council	Reports Field visits	#
Stakeholders	Reports Field visits questionnaires	#
Senior students	questionnaires	#
Alumni	questionnaires	#