PROGRAM SPECIFICATION

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Program Title & Code	Tropical Medicine TROP 500
(2) Final award/degree	Master of Science in Tropical Medicine
(3) Department (s)	Tropical Medicine Department
(4) Coordinator	Assistant Prof. Mahmoud Abdel–Aziz Abdel–Hamid
(5) External evaluator (s)	Prof. Dr/ Mohamed Abd EL Hamid, Faculty of Medicine, Banha University
(6) Date of approval by the Department`s council	May 2016
(7) Date of last approval of program specification by Faculty council	9–8–2016

(B) Professional information

(1) Program Aims:

The broad aims of the program are as follows:

1- To provide updated knowledge and understanding of the physiologic background and derangements of infectious disease & tropical disorders
2- To provide knowledge and understanding of biochemical aspects of common infectious pathogens and common hepatic & gastrointestinal disorders together with understanding of basics of immune defense mechanisms.
3- To acquire basic knowledge and understanding of the features common infectious pathogens and common microbiological problems together with understanding of basics of immune defense mechanisms.
4- To provide updated knowledge and practical skills in common parasitic diseases and potential emerging/threatening diseases.
5- To provide updated knowledge and understanding of pathologic features and pathogenesis of infectious, hepatic and gastrointestinal diseases.
6-- To acquire basic knowledge of epidemiological methods, communicable, non-communicable diseases, preventive medicine and biostatistics.
7- To provide updated knowledge and clinical skills of cardiovascular, respiratory, gastrointestinal, renal, endocrinal, hematologic and metabolic disorders.
8- To provide updated knowledge. clinical skills and training in scientific medical research and communication skills in tropical and infectious diseases
9- To acquire updated knowledge. clinical skills and training in scientific medical research and communication skills in hepatic and gastrointestinal diseases
10- To provide updated knowledge and understanding of basic and clinical aspects of nutritional diseases.
11- To provide updated knowledge and understanding of basic and clinical aspects of travel associated diseases

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

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

A- Knowledge and Understanding

A1. Explain physiologic background of infectious diseases & tropical disorders namely, gastrointestinal, hematological, renal, circulatory, metabolic and endocrinal.
A2- Discuss biochemical aspects of carbohydrates, lipids, proteins, extracellular matrix and immune system
A3- Describe DNA, RNA, genetic code, gene expression, mutation and recombinant DNA techniques
A4. Identify the features of common infectious pathogens in tropical disorders, and infection control
A5. Discuss the different arms of immune defense, types of immune derangement, common immunization and high risk groups.
A6 Describe medically important helminths, protozoa and arthropods and host-parasite interaction
A7 List opportunistic, nosocomial and zoonotic infections
A8. Describe pathologic features of different infectious diseases in different systems such as gastrointestinal, hematological, CNS, respiratory, cardiovascular and renal and common nutritional disorders
A9. Identify types the principles of general pathology namely; inflammation, cell injury, immunopathology, infection and neoplasia.
A10. Identify prevalent health problems, different healthcare programs and determinants of health and disease.
A11. Discuss different epidemiologic methods, statistical tests screening tests and different morbidity and mortality indices.
A12. Recognize principles of evaluation and management of various GIT, CVS, renal, respiratory, heamatologic, endocrinal and metabolic disorders
A13. Explain diagnosis and management of life threatening conditions, autoimmune diseases and immunodeficiency diseases
A14. Review laboratory reference intervals and values
A15. Discuss different infectious diseases including life threatening conditions.
A16.Identify locally endemic infectious diseases with emphasis on viral hepatitis and shistosomiasis and worldwide distribution of different infectious diseases.
A17. Discuss up to date knowledge in infectious diseases from scientific interactions and caring for patients and continued medical education CME.
A18. Review basic principles of medical research and medical biostatistics
A19. Discuss up-to-date knowledge in hepatic and gastrointestinal disorders including life threatening conditions from scientific interactions and caring for patients and continued medical education CME.
A20. Explain Nutritional Requirements, relation between infection and malnutrition, enteral and parenteral nutritional therapy
A21. Descibe Traveler's diarrhea, infection care in travelers and fever in returning traveler

B- Intellectual skills

B1. Integrate the basic science of physiology into clinical practice to explain the various phenomena of infectious diseases & tropical and gastrointestinal disorders
B2. Integrate the basic science of biochemistry into clinical practice of infectious disorders, hepatic and gastrointestinal diseases.
B3. Relate the basic science of microbiology to prevention and management of different infectious disorders using infection control and safety measures
B4. Integrate the basic science of parasitology into clinical practice to explain the various phenomena of common parasitic diseases.
B5. Integrate the basic science of pathology into clinical practice to explain the various phenomena of hepatic, GIT and infectious diseases.
B6: Relate the principles of public health and preventive medicine to various health problems.
B7: Calculate indices of a specific health problem and test the association between certain outcome and an exposure
B8. Construct appropriate management strategies for patients with common medical and critical conditions
B9. Construct appropriate management strategies for patients with common endemic and infectious diseases
B10. Predict appropriate tests for detecting patients at risk or in the early stage of endemic and infectious diseases and determine strategies for responding appropriately
B11. Recognize and cope with uncertainty by using appropriate cognitive and intellectual strategies to deal with uncertainty when it arises and share in scientific research designing and reviewing
B12. Construct appropriate management strategies for patients with common hepatic and gastrointestinal diseases with assessment of risk and benefit
B13. Predict appropriate tests for detecting patients at risk or in the early stage of hepatic and gastrointestinal diseases and determine strategies for responding appropriately
B14. Recognize nutritional deficiencies and select appropriate management strategies for nutritional disorders
B15. Relate geographical distribution of infectious diseases to diagnosis and management of travel associated infection

C- Professional/practical skills

C1. Demonstrate the morphological characteristics and differentiate between the most common helminths and protozoa in parasitology lab

C2 Predict the most frequent clinical, laboratory, radiologic findings of common medical and critical diseases with prioritization of the common possibilities for each problem

C3. Predict the most frequent clinical, laboratory, radiologic findings of common infectious diseases with prioritization of the common possibilities for each problem

C4. Perform and interpret the results of commonly used diagnostic and therapeutic procedures in management of infectious diseases using evidence based medicine

C5. Apply principles of sterilization and infection control regulations on hospital and community levels

C6. Organize medical records and apply epidemiological methods to the investigation, prevention and control of infectious diseases in developing countries

C7. Predict the most frequent clinical, laboratory, radiologic findings of common hepatic and gastrointestinal diseases with prioritization of the common possibilities for each problem

C8. Perform and interpret the results of commonly used diagnostic and therapeutic procedures in management of different hepatic and gastrointestinal diseases using evidence based medicine

C9. Investigate and evaluate their work and that of others and use IT effectively to improve health services.

D- Communication & Transferable skills

D1. Establish professional relationships with medical patients, their families characterized by understanding, trust, respect and confidentiality
D2. Maintain a professional rapport with infectious diseases patients, uphold their dignity and respect their privacy
D3. Manage time and resources effectively, set priorities and work efficiently within the health care team and cope with a changing work environment.
D4. Solve problems related to patients, work management, and among colleagues.
D5. Evaluate their work and that of others using constructive feedback.
D6. Use information and communication technology effectively in the field of medical practice
D7. Develop and deliver a teaching module and guide learners in a work setting
D8. Treat hepatic and gastrointestinal patients, their families professionally to make a relation characterized by understanding, trust, respect and confidentiality

(3) Academic standards:

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

(4) Curriculum structure and contents:

4.a- Duration of the program : 4 semesters

4.b- program structure:

Candidates should fulfill a total of 45 credit hours

●4.b.1: Number of credit hours:

First part: 8 Second part: 29 Thesis: 6 scientific activities: 2

- Lectures: 5 - Lectures :18

-practical: 3 - Clinical:11

●4.b.2: Teaching hours:

Lectures: 345 Clinical/lab: 330 clinical Total:825

120 field

30 practical

(5) Programme courses:

First part:

Course Title	Course Code	NO. of hours per week						Total teaching hours	Program ILOs Covered (REFERRING TO MATRIX)
		Theoretical		Laboratory /practical	clinical	Field	Credit hours		
		Lectures	seminars						
Physiology	TROP 503	½					½	7 ½	A1, B1
Biochemistry	TROP 504	½					½	7 ½	A2, B2
Microbiology	TROP 507	½					½	7 ½	A3-A5, B3
Parasitology	TROP 508	½		1			1½	7 ½ lecture 30 lab.	A6, A7, B4, C1
Applied Pathology	TROP 505	1					1	15	A8-9, B5
Public Health	TROP 518	1					1	15	A10-11, B6-7
Internal Medicine	TROP 510	1			2		3	15 lecture 60 clinical	A12-14, B8, C2, D1
TOTAL		5		1	2		8	75 lecture 30 practical 60 clinical	

Second part

a- Compulsory courses (thesis will be included in this table):

Course Title	Course Code	NO. of hours per week					Total teaching hours	Program ILOs covered (REFERRING TO MATRIX)
		Theoretical		Clinical	Field	Credit hours		
		Lectures	seminars					
Tropical Medicine & Infectious diseases	TROP 512 TIE	9		5		14	135 lecture 150 clinical	A15-18, B9-11, C3-6, D2-7
Tropical Gastroenterology and Hepatology	TROP 512 HGIT	8		4	2	14	120 lecture 120 clinical 120 field	A18-19, B11-13, C5-9, D3-8
Total		17		9	2	28	255 lecture 270 clinical 120 field	
Thesis						6		
Scientific activities						2		

b- Elective courses:

Students choose only one corse of the following:

Course Title	Course Code	NO. of hours per week					Total teaching hours	Programme ILOs covered (REFERRING TO MATRIX)
		Theoretical		practical	Field	Credit hours		
		Lectures	seminars					
Nutritional disorders	TROP 512 NUT	1				1	15 lecture	A20, B14
Traveler Medicine	TROP 512 TRV	1				1	15 lecture	A21, B15
TOTAL		1				1	15 lecture	

Program–Courses ILOs Matrix

Course Title/ Code	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	a12	a13	a14	a15	a16	a17	a18	a19	a20	a21	b1	b2	b3	b4	b5	b6	b7	b8	b9	b10	b11	b12	b13	b14	b15	c1	c2	c3	c4	c5	c6	c7	c8	c9	d1	d2	d3	d4	d5	d6	d7	d8
Physiology	X																					X																																	
Biochemistry		X																					X																															
Microbiology			X	X	X																			X																														
Parasitology						X	X																		X												X																
Applied Pathology								X	X																	X																													
Public Health										X	X																X	X																											
Internal Medicine												X	X	X															X									X									X							
Tropical Medicine& infectious disease															X	X	X	X												X	X	X							X	X	X	X					X	X	X	X	X	X	
Tropical Gastroentrolog																		X	X												X	X	X							X	X	X	X	X			X	X	X	X	X	X
Nutritional disorders																				X														X																				
Traveler Medicine																					X															X																		

Program-objectives ILOs Matrix:

	A1-4	A5-8	A9-12	A13-16	A17-A20	A21	B1-4	B5-8	B9-13	B14-15	C1-4	C5-9	D1-4	D5-8
Objective 1	X						X							
Objective 2	X						X							
Objective 3	X	X					X							
Objective 4		X					X				X			
Objective 5		X	X					X						
Objective 6			X					X						
Objective 7			X	X				X			X		X	
Objective 8				X	X				X		X	X	X	X
Objective 9					X				X			X		X
Objective 10					X					X				
Objective 11						X				X				

Program-methods of assessement ILOs Matrix:

	A1-4	A5-8	A9-12	A13-16	A17-A20	A21-22	B1-4	B5-8	B9-13	C1-4	C5-9	D1-4	D5-8
written	X	X	X	X	X	X	X	X					
MCQ	X	X	X	X	X	X	X	X	X				
Oral	X	X	X	X	X	X	X	X	X				
OSCE									X	X	X	X	X

Academic standards (NARS) –Courses ILOs Matrix (Master degree)

(6) Program admission requirements:

- **General requirements:**

  By laws regulating post graduate Studies.

- **Specific requirements:**

(7) Regulations for progression and program completion:

First part:

- Minimally accepted attendance is 75%.

Second part

1- Attendance Criteria:

- Minimally accepted attendance in each course is 75%.

2-Log book:

-for attending

- Conferences: at least 3 conferences
- Thesis discussions: at least 75% of thesis discussed in the department
- Seminars: at least 75% of Tropical medicine Department seminars
- Workshops: at least 2 workshops related to the research field

-The log should be fulfilled and signed by Head of the department.

3-Practical work:

- Training skills and experience in:
  - Abdominal paracentesis
  - Thoracocentesis
  - Abdominal ultrasonograpy.

- Ultrsound guided liver biopsy.
- Diagnostic and therapeutic Upper gastrointestinal endoscopy.
- Sigmoidoscopy and rectal snip.
- Diagnostic and therapeutic Colonoscopy.

- Rotation according to the schedule determined by the supervisors

4- seminars:

-at least 5 seminars in topics determined by the supervisors must be prepared and presented by the candidate

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

Evaluator	Tools*	Sample size
Internal evaluator (s) Prof. Mahmoud El-Bendary	QUESTIONNAIRE, INTERVIEW, WORKSHOP, COMMUNICATION, E_MAIL	
External Evaluator (s) Prof. Dr/ Mohamed Abd El Hamid, Faculty of Medicine, Banha University	INTERVIEW, E_MAIL	
Senior student (s)		
Alumni		
Stakeholder (s)		
Others		

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

We certify that all information required to deliver this programme is contained in the above specification and will be implemented. All course specification for this programme are in place.	
Program coordinator: Name: **Assistant Prof. Mahmoud Abdel-Aziz Abdel-Hamid** **Assistant: Dr Mohamed El Diasty** **Dr Walaa Shabana**	Signature & date:
Dean: Name: **Prof. Dr. Saeed Abdel Hady**	Signature & date:
Executive director of the quality assurance unit: Name: **Prof. Dr. Seham Gad El-Hak**	Signature & date: