PROGRAM SPECIFICATIONS

Program Title:

Master Degree of Endemic diseases

Code:

IMED

Program Specification

A- Basic Information

1- Program Title: **Master Degree of Endemic diseases**

2- Program Type: **Single** √ ☐ Double ☐ Multiple ☐

3- Department (s): **Infectious and Endemic diseases Department**

4- Coordinator: **Head of department: Prof Adel Ahmed Hassan**

5- External Evaluator(s) : **Prof.** Professor. Mohamed Kamal shaker Prof. and head of Tropical Medicine department Ain Shams University
Professor. Ebrahim Hegazy Prof. Tropical Medicine Zagazig University

6- Last date of program specifications approval**: the bylaws of the MD program in Endemic Diseases in the Faculty of Medicine, Suez Canal University were approved by the Supreme Council of Universities on 2016**

7-Date of specification revision approval: December 2016

8- Number of credit points for this degree: 120 CP

B- Professional Information

1- Program Aims

The overall goals of the program are to develop a specialist in endemic and infectious diseases with the following characteristics:

1. Understanding the basic microbiology of bacteria, fungi, viruses, and parasites. In addition the specialist should have a good understanding of the clinical syndromes which are associated with various infections, including community and hospital acquired infections, infection in immunocompromised, intensive care patients and health care workers and other profession related infections.
2. Should have a thorough understanding of commonly used antimicrobials and anti-parasitic drugs, their toxicity and development of resistance and their clinical indications.
3. Should have a fundamental understanding of the common infectious hazards for travelers to tropical and subtropical areas and providing methods for prevention including chemoprophylaxis and vaccination.
4. Should have a fundamental understanding of the common causes of fever of unknown origin (due to infectious and non-infectious diseases) including HIV and related syndromes and capable of communicating with other clinicians of different specialties to diagnose and manage such cases.
5. Should have a fundamental understanding of the common endemic diseases in the community whether related to chronic infections (HBV, HCV and schistosomiasis and other parasitic diseases) and their complications (including the gastrointestinal and hepatobiliary diseases) and non-infectious diseases (including malignancy, nutritional deficiency and environmental hazards).
6. Should have the skills to communicate with the health care authority providing knowledge and consultation and sharing in research and continuing medical education.

7. Provide students with adequate knowledge and skills in research methodology that enable them to design experiments, analyze data, and review literature critically
8. Identify and justify the basic components of the research framework, relevant to the tackled research problem.
9. Provide students with adequate knowledge and skills in research ethics that enable them to design researches with high ethical consideration.

2- Intended Learning Outcomes (ILOs)

By the end of the program, the candidate should be able to:

a- Knowledge and Understanding:

a1. Demonstrate conceptual awareness of infectious diseases, their microbial causes, clinical presentation, laboratory diagnosis, prevention and treatment.
a2. Consolidate their previous knowledge of Physiology, in the topics relevant to endemic and infectious diseases, with special emphasis on the clinical relevance of these topics
a3. Identify the basic knowledge related to Pathology relevant to the practice of endemic diseases
a4. Identify the basic knowledge related to the biology and pathogenesis of the parasites especially on the tropics.
a5. Identify the concept of general pharmacology including the concepts of pharmacodynamics and pharmacokinetics in rationale drug prescription
a6. Recognize the concept of drug interaction in rational drug prescription
a7. Discuss the role of immune system in the pathophysiology of endemic and infectious diseases.
a8. Demonstrate basic knowledge of research ethics
a9. Demonstrate basic knowledge of biostatistics
a10. Identify the key concepts of infectious disease transmission, epidemiological methods for the investigation of infectious disease and apply appropriate prevention and control methods
a11. Demonstrate knowledge of basic blood transfusion practice.
a12. Identify the importance of lab investigations in diagnosis & follow up of anemia, diabetes mellitus, blood malignancies and blood parasites.
a13. Describe the most common bacterial , viral , and parasitic disease in the tropic and apply new WHO guidelines of management.
a14. Discuss pathophysiology of portal Hypertension
a15. Discuss liver cell failure according to the American Association of study liver disease
a16. Discuss causes of chronic diarrhea , inflammatory bowel disease and gastrointestinal functional disorders according to American college of gastroenterology guidelines
a17. Discuss the basics of esophagogastroduodenoscopy and colonoscopy.
a18. Identify the basic concepts of quality assurance in professional practice related to Infection control.

b- Intellectual Skills:

b1. Demonstrate the ability to take full history and perform general, abdominal, and chest examinations.
b2. Use knowledge of evidence-based medicine and apply its principles in practice.
b3. Use multiple sources, including information technology, to optimize lifelong learning and support patient care decisions.

b4. Develop effective strategies for the identification and upgrading of medical knowledge needed for effective practice including the new guidelines for diagnosis and management of common endemic diseases and the changing pattern of infectious diseases worldwide.
b5. Use clinical problems to highlight infectious diseases of high priority (in the community and the other health care settings) about parasitic infection
b6. Communicate with the local health authorities and population so as to study the disease dynamics, provide knowledge, health education and preventive measures for common endemic diseases in the community.
b7. Apply the basic statistical and ethical requirements for the completion of research thesis
b8. Implement the appropriate research methodology
b9. Write informative report, including a precise diagnosis whenever possible, a differential diagnosis when appropriate, and recommended follow-up .
b10. Provide direct communication to the referring physician or appropriate clinical personnel when interpretation of a laboratory assay reveals an urgent, critical, or unexpected finding and document this communication in an appropriate fashion.
b11. Conduct both individual consultations and presentations at multidisciplinary conferences that are focused, clear, and concise.
b12. Choose effective modes of communication (listening, nonverbal, explanatory, questioning) and mechanisms of communication (face-to-face, telephone, e-mail, written), as appropriate.
b13. Establish a fruitful professional communication with Pathologists.
b14. Apply risk assessment in clinical decision

c Professional and Practical Skills

c1.Plan different management strategy of different infectious diseases and hepato-gastroenterology.

c2.Perform the different procedures related to the diagnosis and treatment which is essential in his daily practice.

c3.Interpret abdominal U/S related to clinical view.
c4.Deal with the patients as regarding easy communication, demonstrating the possible complications invasive procedures.
c5.Write a conclusive medical report in your daily work.

d- General and Transferable Skills

d1. Present information clearly in written, electronic and oral forms
d2. Communicate ideas and arguments effectively;
d3. Manage time and resources and set priorities;
d4. Perform self-evaluation and specify his own educational needs and be a lifelong learner.
d5. Apply the principles of scientific research
d6. Analyze and use numerical data (Use simple statistical methods)
d7. Teach effectively and act as a mentor to others
d8. Work effectively within a team.
d9. Communicate effectively with individuals regardless of their social, cultural or ethnic backgrounds, or their disabilities.
d10. Use computers efficiently.

3- **Academic Standards**

3a External References for Standards (Benchmarks)
Generic Academic Reference Standards (ARS) for post graduate programs
3b Comparison of Provision to External References
See attached files

4- Curriculum Structure and Contents

4a- Program duration: the program lasts for a minimum of 2 academic years and maximum 5 years, as specified in the internal bylaws for postgraduate studies based on credit points system in the Faculty of Medicine, Suez Canal University approved on February 7th, 2016.

4b- Program structure:

Master Program Credit points (CP) structure:
Total needed credit points for getting master degree 120 CP

The program consists of **First part 30 CP, Thesis 30 CP, and Second part 60 CP**

1. The first part of the program: 30 CP, its duration (15 weeks) for one academic semester. It includes
    a. A course in Research Methodology planned and held in the Community Medicine Department of the Faculty of Medicine, Suez Canal University. This part includes 4 CP.
    b. A courses in Research ethics planned and held in the Forensic and Toxicology Department of the Faculty of Medicine, Suez Canal University. This part includes 2 CP.
    c. One elective course, the students should select one elective among six courses. This part includes 2 CP.
    d. A course in applied pathology in pathology department of the Faculty of Medicine, Suez Canal University. This part includes 3 CP.
    e. A course in applied physiology in physiology department of the Faculty of Medicine, Suez Canal University. This part includes 3 CP.
    f. A course in parasitology in parasitology department of the Faculty of Medicine, Suez Canal University. This part includes 2 CP.
    g. A course in microbiology in microbiology department of the Faculty of Medicine, Suez Canal University. This part includes 3 CP.
    h. A course in applied pharmacology in pharmacology department of the Faculty of Medicine, Suez Canal University. This part includes 3 CP.
    i. A course in clinical immunology in immunology and microbiology department of the Faculty of Medicine, Suez Canal University. This part includes 3 CP.
    j. A course in clinical pathology in clinical pathology department of the Faculty of Medicine, Suez Canal University. This part includes 2 CP.
    k. A course in public health planned and held in the Community Medicine Department of the Faculty of Medicine, Suez Canal University. This part includes 3 CP.

2. Master thesis: 30 CP, not included in the total marks for master degree, the candidate has the right to register the thesis protocol after 6 months from the degree registration. The thesis defense is allowed after 6 months from the date of the faculty council approval on the thesis protocol and passing the first part exam.
3. The second part of the program: 60 CP, its duration (45 weeks) for 3 consecutive academic semesters. The second part comprises the specialized courses in endemic diseases, planned and held in the infectious and endemic Department. This part lasts for 1.5 years ending by written and practical exams.

4bi- No. of hours per week: 2 CP / week which equivalent 50 hours/ week, including lectures, tutorials, self-learning and hands-on training.

4bii- No. of credit Points: the Master program is 120 Credit Points

Every credit point include 25 working hour (30% = 7 hours for face to face learning activities, and 70% =18 hours for self-learning activities).

5-Program Courses

5.1- Level/Year of Program: 1st part MSc

a. Compulsory

Courses			Assessment				
Code No.	Course Title	No. of Credit points	Written Exam			Oral exam	Practical or clinical Exam
			No of Papers	Duration	Marks		
RB	Research methodology and Biostatistics	4	1	2 hours	80		
RE	Research Ethics	2	1	1 hour	40		
IMED01	Applied Physiology	3	1	1 hour	45	15	
IMED02	Microbiology course	3	1	1 hour	45	15	
IMED 03	Applied pathology	3	1	1 hour	45	15	
IMED04	parasitology	2	1	1 hour	30	10	
IMED05	Clinical pharmacology	3	1	1 hour	45	15	
IMED06	Clinical immunology	3	1	1 hours	45	15	
IMED07	Public health	3	1	1 hours	45	15	
IMED08	Clinical pathology	2	1	1 hours	30	10	
E	Elective Course*	2	1	1 hour	40		
Total		30 credit points			600 marks		

***E: Student should select one course of the following as an elective course:**

One elective course has 2 CP. The students should select one elective in first part of the Master degree

E01	**Evidence Based medicine**	**(Community Department)**
E02	**Scientific Writing**	**(Medical Education Department)**
E03	**Quality in Medical Education**	**(Medical Education Department)**
E04	**Infection Control**	**(Microbiology Department)**
E05	**Critical Appraisal**	**(Community Department)**
E06	**Communication Skills**	**(Medical Education Department)**

5.2- Level/Year of Programme: 2nd part MSc

a. Compulsory

Courses			Assessment					
Code No.	Course Title	No. of Credit points	Written Exam			Oral exam	Practical or clinical Exam	Continues assessment *(Portfolio)
			No of papers	Duration	Marks			
IMED03	Advanced Course in endemic and internal medicine	15	2	3 hours For each paper	165 for each paper	110	330	330
	Practical training in endemic and internal medicine	40						
	**Scientific activities	5 (not included in the total marks)						
Total		60 credit points			1100 score			

***Portfolio scores distributed in the different parts of the portfolio and its total score included among the total mark of the second part**

****Scientific activities are not included in the total marks**

5.3- Thesis: A faculty senior & junior supervisor from the stuff members are nominated by the department council to prepare a proposal of the thesis protocol after the selection of a subject that is complementary to the research plans of the department. Data collection, methodologies, study question, time table, ethical considerations and budget are formulated by the candidate under guidance of his supervisors into a research project. The research protocol is then peer reviewed by two different stuff members nominated by the Head of the department who share their ideas and comments with the supervisors to reach to the final form. The research protocol is discussed then openly in one of the department councils to be approved and diverted to the Faculty research committee where it is subjected to a critical appraisal to meet the research basic standards set by the committee. The final approvals of the research protocol are then issued by the committee of post graduate studies, the Faculty and University Council to be registered. The candidate has the right to register his/her thesis protocol after 6 months from the degree registration. The first time for thesis defense after 6 months from the date of the faculty council approval on the thesis protocol and passing the first part exam.

N.B. **Thesis represents 30 credit points not included in the total mark for master degree.**

6-Program Admission Requirements

- The program accepts candidates with Bachelor degree in Medicine and Surgery with minimum good grade & very good.
- Registration for the program opens 2 times/year, according to the internal bylaws for postgraduate studies of the Faculty of Medicine, Suez Canal University.

7- Student Assessment Methods

7.1 Written (MEQ) to assess the cognitive domain.
7.2 MCQs to assess the cognitive domain
7.3 Oral Viva Cards to assess higher cognitive and attitude domains.
7.3 Observations to assess practical and presentation skills.
7.4 Portfolio to assess the cognitive, psychomotor and the affective domains.

8- Weighting of Assessments

Total marks for master degree 1700

Type of exam

First part (30 credit points= 600 mark)

• Written exam	490
• Oral and practical exam	110
• **Total**	**600**

Second part (60 credit points including 5 credit points not included in the total marks =1100 mark)

• Oral exam	110
• Practical exam	330
• Written exam	330
• Portfolio	330
Total	**1100**

Total of the Master degree **1700**

9- Regulations for Progression and Program Completion

The regulations for program completion follow the regulations of Master degree of endemic and infectious diseases in the Faculty of Medicine, Suez Canal University approved by the Supreme Council of Universities.

First part

Passing level 60% of total marks of the exam
At least 50% passing level of the total written exam marks

Second part

Passing level 60% of total marks of the exam

Passing level 60% is prerequisite for MSC degree

Thesis/Assay

Passing thesis defense is perquisite for getting MSc. Degree

10-Evaluation of Program Intended Learning Outcomes (ILOs)

Evaluator	Tool	Sample
1- Postgraduate students	Needs assessment questionnaires	Random sample of participants
2- Alumni	Self-administered questionnaires	Comprehensive sample
3- Stakeholders	Self-administered questionnaires	Random sample
4-External Evaluator(s) (External Examiner(s))	External audit of the program specifications	

Head of Endemic and Infectious Diseases Department

Prof. Adel Ahmed Hassan

Date: December 2016