



**Department of Medical Physiology** 

**Course specifications** 

# Medical Physiology for M.D in Tropical Medicine

2016/2017

Medical Physiology for Tropical Medicine Doctorate degrees Course specifications

University: Tanta Faculty: Medicine Department: Medical Physiology

# A- Administrative Information

- Program title: Medical Physiology for M.D in Tropical Medicine
- Department offering the program : Tropical Medicine Department
- Departments responsible for the program: Tropical Medicine Department& Medical Physiology.
- Course Code: TROP 9001
- Academic year/ Level: 2016 /2017
- No. of Credit/taught hours: 7credit hour.
- Authorization date of course specification:

#### **B- Professional Information**

#### 1- Overall Course aims:

#### Our course aim to:

• develop the candidates at the levels of knowledge , skills, and attitude producing an academic specialist who is able to add new in the field of Medical Physiology related to tropical medicine and infectious diseases

# 2- Intended learning outcomes (ILOs):

#### a. knowledge and understanding:

At the end of the course the graduate should be able to:

- a1-Recognize a comprehensive understanding of the theories and principles, and up dates in pathogenesis of infection (viral, bacterial, parasitic,...ect) at physiological, levels
- a2-Specify selected topics in Medical Physiology at greater depth.
- a3-Identify the relative contribution of each organ system to the maintenance of the milieu interior

# b. Intellectual skills:

At the end of the course the graduate should be able to

- ${\it b1-Plan}$ , and evaluate medical information in endemic and infectious diseases to elicit new conclusions or hypothesis.
- b2-Practice medical problem related to endemic and infectious diseases
- b3-Demonstrate clinical syndromes of major importance in the tropics

#### c. Professional &practical skills:

At the end of the course the candidate will be able to:

- c.1. Evaluate medical methods and tools used in his specialty and share in its development and progress .
- c.2. Select recent technological tools to serve his career

#### d. General transferable skills:

At the end of the course the graduate should be able to

- d.1. Use the available resources to update their knowledge
- d.2. Solve problem on basic computer using skills
- d.3. Use specified topics on the library books, medical journals, and internet (eg assignments, journal club).
- d.4. Apply self evaluation and specify his medical educational needs (eg through tutorials)
- d.5. Mange time and work in team
- d.6. Apply continuous medical education.

#### **3- Course contents:**

#### 3.1 course structure:

- 15 weeks /semester
- **Semester** starts in 1<sup>st</sup> of May and in 1<sup>st</sup> of November

# 3.2 course admission and progression requirements:

Registration, progress requirements, and schedule of written exams are provided by the faculty post graduate by laws provided to all students through post graduate guide book

# 3.3 Course details/ semester

Course title	Topic	No. of credit hours	No of Credit points	prerequisit
TROP 9001	compulsory courses in applied Medical Physiology*	7 hs	21 points	

# 3.4Details of teaching Course /wk/15wks first semester

Course code	Teaching courses	No. of credit hours/wk	No. of contact hours/wk	Remarks
	Formal lectures attended by the students	4hs	4hs	
TROP 9001	Tutorial	1h	2hs	
	Seminar	2h	4hs	

\* The students should attend 75% of the activities related to the course . If the attendance less than 75%, the student should be notified and considered as forced withdrawal FW \*A log book is constructed to evaluate the attendance of each student for the different activities listed above by the main professor's advisory committee. The log book should be completed before the final comprehensive examination by one month.

Through out of the course different activities are recorded daily in the log book as follows; annex 1

#### Detailed contents of the course topics.

# (Syllabus contents):

#### 1. Theory& activities.

These listed topics below are covered through a mix of self learning and structured program (Formal lectures, tutorial, seminars and assignment) scheduled and previously announced in Medical Physiology department.

# **Detailed contents of the course topics. (Syllabus contents):**

# List of formal lectures, tutorials and seminars (Special topics).

- 1. Function of the liver and bile pigment metabolism and its disorders.
- 2. Acid base balance.
- 3. Pulmonary circulation and pulmonary function tests...
- **4.** Functions of the Kidneys
- **5.** Water balance.
- **6.** Regulation of arterial blood pressure.
- **7.** Physiological basis for gastrointestinal secretion, motility & the basic principle of gastrointestinal absorption
- **8.** Reticulo- endothelial system functions of the spleen and lymph nodes
- **9.** Enterohepatic circulation.
- **10.** Neuro- transmitter of enteric nervous system
- 11. PathoMedical Physiology of diarrhoea and constipation.
- **12.** pathoMedical Physiology of fever.
- **13.** Medical Physiology of Jaundice.
- **14.** Brain-Gut Interactions
- **15.** Absorption and Mal absorption

#### **Related specialty systems:**

- 1. Cardiovascular system.
- 2. Digestive system.
- 3. Endocrine system.
- 4. Blood.

# 4- Teaching and learning methods:

**4.1** Illustrated lectures.

- **4.2** Tutorial is scheduled and previously announced special topics from the curriculum are discussed in the tutorial.
- **4.3** Assignment to be prepared by the graduate in one of the special topic taught.
- **4.4** Seminars are scheduled and previously announced
- **4.5** Fully equipped Medical library well stocked with books and journals related to Medical Physiology
- **4.6** Faculty equipped with internet acess.

Each teaching method is designed to serve different educational goal & together they provide an appropriate stimulating atmosphere for learning.

#### 5- Student Assessment:

- 5.1. An end semester written and oral examinations
- 5.2. The grades of the semester (Final qualified examination) is recorded in transcript for each student and the grades should not be less than C- or the student should repeat this examination.

#### 6- Assessment schedule:

6.1. End Semester Final written	At the end of the semester (60% of the total mark)	
qualifying examination	with at least 60% grade if less, The student	
. , ,	repeat the written and the oral examination.	
6.2. oral qualifying examination	At the end of the courses (40% of the total mark),	
	After the written (if its evaluation is satisfactory)	
	with grade 60% if less the student repeat only	
	the oral exam	

# 7- Weighing of assessments:

# **Grading system for End Semester written Exam:**

Grade	%	Code	CGPA points
Excelent	95% or more	A	4.000
Excelent	90% to less than 95%	A-	3.666
Very Good	85% to less than 90%	B+	3.333
very Good	80% to less than 85%	В	3.000
Good	75% to less than 80%	B-	2.666
doou	70% to less than 75%	C+	2.333
Satisfactory	65% to less than 70%	С	2.000
	60% to less than 65%	C-	1,666
Failed	55% to less than 60%	D+	1.333
	30% to less than 55%	D	1.000

Less than 30%	F	0.000

# Final comprehensive exam

Medical Physiology	Final written	Final oral	Total
Final comprehensive exam	90 (60%)	60 (40%)	150

#### **List any formative only assessment:**

**Final semester examination:** In the form of:

- **Written examination**: consists of one paper, three hours designed to evaluate understanding of the subject..
- **Oral examination:** each student is evaluated by at least 4 examiners,

#### 8-List of references:

# 8.1. Essential books (Textbooks):

The following textbooks will be used in the course

- 1. Guyton & Hall textbook of Human Medical Physiology and Mechanisms of Disease.
- 2. Gannon (review of medical Medical Physiology).
- 3. Vander's human Medical Physiology.
- 4. L.S. Costanzo. Medical Physiology. 3rd edition. W.B. Saunders Company.
- 5. R.A.Rhoades and D.Bell. Medical Medical Physiology. Lippincott Williams & Wilkins ,  $3^{\rm rd}$  edition

# 8.2. Alternative textbooks:

- 6. Principle of Medical Physiology. Robert M.Bern.
- 7. PathoMedical Physiology. Biological basis of disease. Kathren L. Macance RN..
- 8. Human Medical Physiology from cell to system by: Lauralee Sherwood.
- 9. L.S.Costanzo. Medical Physiology. Board review series. Lippincott Williams & Wilkins.
- 10. C.H. Best and N.B. Taylor. physiological basis of medical practice. Lippincott Williams & Wilkins.

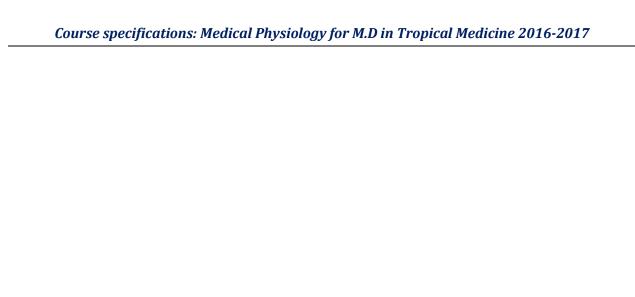
#### 8.3. Periodicals, Web sites, etc:

- www.tebawy. 5ucom.
- http://bcs.whfreeman.com.
- http://www.bpcc.eud/sciencealliedhealth/humanMedical Physiologylinks.html.
- http://bio-alive.com/animations/Medical Physiology.htm.

# 9-Other resources/ facilities required for teaching and learning to achieve the above ILOs:

- All facilities required for teaching are available.

10-We certify that all of the information required to deliver this course is contained in the above specifications and will be implemented.



We verify that the above course and the analysis of students and external evaluator opinions are accurate.
Course coordinator and head of department namesignatureDate
Head of quality assurance unit: namesignatureDate