



Quality Assurance Unit



Tanta University
Faculty of Medicine

Department of Medical Physiology

Course specifications

**Medical Physiology for
Emergency medicine &
Traumatology Master degree
First Part**

2016/2017

Medical Physiology for Emergency medicine & Traumatology Master Degree Course specifications

University: Tanta

Faculty: Medicine

Department: Medical Physiology

A- Administrative Information

- **Program title: Medical Physiology for Emergency medicine & Traumatology Master degree**
- **Department offering the program : Emergency medicine & Traumatology**
- **Departments responsible for the program: Medical Physiology& Emergency medicine & Traumatology**
- **Course Code: EMERT 8001**
- **Academic year/ Level : 2016 /2017**
- **No. of Credit/taught hours: 1 theoretical credit hour(1 hour/week for 15 weeks)**
- **Authorization date of course specification: / /**

B- Professional Information

1- Overall Course aims:

Our course aim to offer advanced knowledge of Medical Physiology related to the emergency and traumatology as regard the physiological response to external and internal changes

And to provide the mechanisms underlying the pathophysiological response to these stimuli ,organize and supervise the desired manengereal and leadership

2- Intended learning outcomes (ILOs):

a. knowledge and understanding:

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

- a.1. Express knowledge and understanding of human Medical Physiology in relation to Emergency and traumatology .
- a.2. Identify the function of the basic cellular, organs and higher level system.
- a.3. Identify basic defects in physiological control mechanisms that result in stress conditions.
- a.4. Express knowledge of basic cardiovascular, endocrine and hematology.

b. Intellectual skills:

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

- b.1. Planning critical analysis and evaluation of an area relevant to their field of work
- b.2. Interpret clinical physiological results
- b.3 Analyse common problems in acute care & trauma surgery and posses knowledge of management alternatives.

d. General transferable skills:

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

- d.1. - Apply self education and specify his educational needs.
- d.2. - Practice team working and trauma team leader in specialized professional jobs.
- d.3. - Perform continuous medical education.

3-Course contents:

Course title	Topic	No. of credit hours	No of Credit points	Remarks
Medical Physiology	Emergency medicine & Trumatology	7 hs (1for Medical Physiology)	21 points (3for Medical Physiology)	Co-requisite with anatomy, pharmacology & clinical pathology

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

No general topics

Related specialty systems:

1. All topics of respiration.
2. All topics of cardiovascular system & special circulation (pulmonary, coronary , cerebral circulation)
3. Haemostasis and blood coagulation, blood transfusion, haemorrhage
4. Water and electrolyte balance and acid –base balance.

Related specialty topics.

1. Disorders leading to thrombosis & markers of thrombotic activity.
2. Circulatory hormones affecting vascular system.
3. PathoMedical Physiology of hypertension.
4. Ionic transport & homeostasis.
5. Physiological mechanisms controlling injury, inflammation & pain.
6. Hypothalamus & body temperature regulation in health & disease.
7. Medical Physiology & pathoMedical Physiology of coronary, pulmonary & cerebral circulation.

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 scheduled and previously announced to facilitate selection identification of their thesis.

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

5-Student Assessment:

End semester final examination consists of:

5.1. Final written consists of one paper, 3 hours. With the co-requisite subjects The written is divided into 3 parts part1 short questions in the form (state, mention ,explain compare define etc). the 2nd part in problem solving question the 3rd part is MCQ questions to assess (a.1, a.2, a.3, a.4).

5.2. Oral to assess (a.1, a.2, a.3, a.4 & b.1,2,3, d.1,2,3)

6-Assessment schedule:

6.1. End Semester Final written qualifying examination	At the end of the semester (60% of the total mark)
6.2. oral qualifying examination	After the written (40% of the total mark)

7-Weighing of assessments:

Grading system for End Semester written Exam:

Grade	%	Code	CGPA points
Excelent	95% or more	A	4.000
	90% to less than 95%	A-	3.666
Very Good	85% to less than 90%	B+	3.333
	80% to less than 85%	B	3.000
Good	75% to less than 80%	B-	2.666
	70% to less than 75%	C+	2.333
Satisfactory	65% to less than 70%	C	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

Final exam	Final written	Final oral	Total
Final comprehensive exam of Medical Physiology, anatomy, pharmacology & clinical pathology	90(60%)	60(40%)	150

- Final written examination consists of one paper, 3 hour s. With the co-requisite anatomy, pharmacology & clinical pathology

- Oral examination by two examiners

8- List of references:

8.1. Essential books (Textbooks):

- Guyton & Hall textbook of Human Medical Physiology and Mechanisms of Disease.
- Gannon (review of medical Medical Physiology).
- Vander's human Medical Physiology.

8.2. Recommended books:

- Applied Medical Physiology in intensive care by M.R. Pinsky (Editor), J. Mancebo (Editor), L. Brochard (Editor), Gran Hedenstierna 2009.
- An introduction to human disease: pathology & pathoMedical Physiology correlations by Leonard Crowley. Hardcover August 2009.
- Critical pathways in cardiovascular medicine: Second Edition Lippincott Williams & Wilkins.
- Applied Medical Physiology: A manual showing functions of the various organs in disease by Frederich Augustus Rhodes.

8.3. Periodicals, Web:

- www.tebawy.5u.com.
- <http://bcs.whfreeman.com>.
- <http://www.bpcc.edu/sciencealliedhealth/humanMedicalPhysiologylinks.html><http://bio-alive.com/animations/MedicalPhysiology.htm>.
- Human Medical Physiology from cell to system By: Lauralee Sherwood.

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
name.....signature.....Date.....

Head of quality assurance unit:
name.....signature.....Date.....