



Quality Assurance Unit



Tanta University  
Faculty of Medicine

**Department of Medical Physiology**

**Course specifications**

# **Medical Physiology for Audiology Master degree First Part**

**2016/2017**

Medical Physiology for Audiology Master Degree Course specifications

**University: Tanta**

**Faculty: Medicine**

**Department: Medical Physiology**

**A- Administrative Information**

- **Program title: Medical Physiology for Audiology Master degree**
- **Department offering the program : Audiology**
- **Departments responsible for the program: Medical Physiology& Audiology**
- **Course Code: ENT 800AUD2**
- **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:**

The aim of this course is to:

- Help the postgraduate students to achieve adequate level of both basic and advanced essential knowledge about established and evolving topics concerned with Medical Physiology related to their speciality.
- Acquire knowledge to address, demonstrate, and practice positive attitudes that will help them to achieve medical research on scientific bases

**2- Intended learning outcomes (ILOs):**

**a. knowledge and understanding:**

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

- a.1. Recognize basic theory and principle of Medical Physiology that help them to understand human disease regarding etiology, diagnosis and control.
- a.2. Identify the Normal functions of the auditory system with basic knowledge of concept in the physics of sound.
- a.3. Identify basic defects in physiological control mechanisms that result in disease state.
- a.4. Express knowledge of human Medical Physiology including methods and procedures in evaluating the auditory system.

**b. Intellectual skills:**

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

- b.1. Analyze appropriate professional attitudes and behaviors in different practice situations.
- b.2. Practice presentation skills , and evidence based scientific discussion

**d.General transferable skills:**

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

- d.1. Communicate effectively with his colleagues and scientific institutes.
- d.2. Use the basic computer skills which serve his career development
- d.3. Apply self evaluation and specify his medical educational needs.
- d.4. Use different learning resources to get knowledge and information.
- d.5. Manage time and practice team working through collaboration with other specialties
- d.6. Apply continuous medical education

**3- Course contents:**

Course title	topic	No. of credit hours	No of Credit points	Remarks
<b>Medical Physiology</b>	Audiology	3½ hs (1for Medical Physiology)	10½ points (3for Medical Physiology)	Co-requisite with statistics.

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

**General topics**

Week No.	topic
1-	1- Hemostasis, anticoagulants and hemorrhagic disorders.
2-	2- pain, pain analgesia system 3- Homeostasis and Ca++ homeostasis
3-	4- Arterial Blood Pressure and pathophysiological basis of hypertension.
4-	5- chemical transmitters of ANS.
5-	6- Hemorrhage and shock.
6-	7- Heart rate and its regulation
7-	8- Control of diameter of arterioles
8-	9- Supra- renal cortical hormones and disorders 10- Hormones regulating glucose metabolism. (Diabetes mellitus: PathoMedical Physiology and its complications
9-	11- ABO system, Rh factor, Blood transfusion and its incompatibility. 12- Regulation of body water and electrolytes.
10-	13- Acid – Base balance and disorders 14- Hypoxia and cyanosis
11-	15- Erythropoiesis , Anemia and Polycythemia. 16- Cardiac reserve
12-	17- Thermoregulation & Clinical aspects of thermoregulation 18- Cardiac Output
13-	19- Cellular mechanism of hormonal actions

	20- Edema
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**Related specialty systems.**

1. All topics of hearing.
2. Speech and its disorders.
3. Non auditory membranous labyrinth.

**Related specialty topics.**

1. Auditory neuroscience.
2. Impedence matching by ossicular system.
3. Hearing abnormalities, central auditory mechanism.
4. Function of the brain in language input, output & disturbance.

**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.
- 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 2<sup>nd</sup> part in problem solving question the 3<sup>rd</sup> 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, d2,d3,d4,d5,d6)

**6- Assessment schedule:**

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

**7- Weighing of assessments:**

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

Grade	%	Code	CGPA points
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<b>Excelent</b>	95% or more	A	4.000
	90% to less than 95%	A-	3.666
<b>Very Good</b>	85% to less than 90%	B+	3.333
	80% to less than 85%	B	3.000
<b>Good</b>	75% to less than 80%	B-	2.666
	70% to less than 75%	C+	2.333
<b>Satisfactory</b>	65% to less than 70%	C	2.000
	60% to less than 65%	C-	1,666
<b>Failed</b>	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**

<b>Final exam</b>	<b>Final written</b>	<b>Final oral</b>	<b>Total</b>
Final comprehensive exam of Medical Physiology & statistics	45 (60%)	30 (40%)	75

- Final written examination consists of one paper, 3 hour s. With the co-requisite statistics
- 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://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.....