



Quality Assurance Unit



**Tanta University
Faculty of Medicine**

Department of Medical Physiology

Course specifications

**Medical Physiology for
otorhinolaryngology Diploma &
Master degrees First Part**

2016/2017

Medical Physiology for otorhinolaryngology Diploma & Master degrees Course specifications

University: Tanta

Faculty: Medicine

Department: Medical Physiology

A- Administrative Information

- **Program title: Medical Physiology for otorhinolaryngology Diploma & Master degrees**
- **Department offering the program : otorhinolaryngology**
- **Departments responsible for the program: Medical Physiology & otorhinolaryngology department**
- **Course Code: ENT 7002& ENT 8002**
- **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 course aim to provide the graduate with knowledge, skills and attitude that qualify him to advance his or her knowledge in the field of specialty of Ear, Nose, Throat in a professional level. advanced knowledge in the approach to scientific research, reflecting the interest of our faculty and breadth of the discipline of Medical Physiology to help the graduate to move onto the rewarding and challenging professional careers.

2- Intended learning outcomes (ILOs):

a. knowledge and understanding:

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

- a 1 Record the basics Medical Physiology of hearing, equilibrium , autonomic nervous system., respiration and special sense.
- a 2 Identify adequate knowledge and skills according to professional's current standard.
- a 3 Express Advanced understanding of the function of the basic cellular, organs and higher level system.
- a 4 Explain the mechanistic studies of the important cellular and system process.
- a 5 Recall the basic defect in physiological control mechanisms that result in disease state.

b. Intellectual skills

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

- b.1. Solve problems related to Otorhinolaryngology .

d. General transferable skills:

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

- d.1- Communicate effectively with his colleagues and patients
- d.2- Apply self evaluation and specify his medical educational needs.
- d.3- Use different learning resources to get knowledge and information.
- d.4- Apply continuous medical education

3- Course contents

Course title	topic	No. of credit hours	No of Credit points	Remarks
Medical Physiology	ENT	2 ¹ / ₃ hs (1for Medical Physiology)	7 points (3for Medical Physiology)	Co-requisite with genetic & statistics.

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

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. Deglutition.
2. All topics of hearing.
3. Taste and smell.
4. Speech and its disorders.
5. Auditory labyrinth.

Related specialty topics.

1. Auditory neuroscience.
2. Impedence matching of ossicular system.
3. Hearing abnormalities, central auditory mechanism.
4. Function of the brain in language input, output & disturbance.
5. Medical Physiology of equilibrium.
6. Deglutition Medical Physiology & PathoMedical Physiology

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 2nd part in problem solving question the 3rd part is MCQ questions to assess (a.1, a.2, a.3, a.4,a5).
- 5.2. Oral to assess (a.1, a.2, a.3, a.4,a5 & b.1, d.1,2,3,4)

6- Assessment schedule:

6.1. End Semester Final written

At the end of the semester (60% of the total mark)

qualifying examination	
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 practical	Final oral	Total
Final comprehensive exam of Medical Physiology, genetic & statistics.	30	10	10	50

- Final written examination consists of one paper, 3 hour s. With the co-requisite genetic & statistics.
- There is no Medical Physiology practical exam
- 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.....