Quality Assurance Unit

Tanta University

Faculty of Medicine

Department of Tropical medicine and infectious diseases

Course Specifications

Doctorate degree of Tropical medicine and Infectious Diseases

First part: TROPID 9001 (Applied Physiology)

2025-2026

Course Specifications of Tropicalmedicine and infectious diseases-Doctoratedegree-First part- TROPID9001-Applied Physiology

University: Tanta **Faculty: Medicine** **Department: Tropical medicine and infectious diseases**

A- Administrative Information

1. **Course title:Applied physiology**
2. **Department offering the program:Tropical medicine and infectious diseases department**
3. **Department responsible for the course:Tropical medicine and infectious diseases department**
4. **Course code: TROPID9001**
5. **Level: First part doctorate degree**
6. **No. of Credit / taught hours:1 credit hour/15 taught hours**

Authorization date of course specification: 7/10/2025

B- Professional Information

1 – Overall Course aims

This course aims to **help the student acquire a basic knowledge of clinical physiology, in those areas relevant to differential diagnosis and to perfect management of patients suffering from hepatobiliary, gastrointestinal, endemic or infectious diseases**

2 – Intended learning outcomes (ILOs):

A-knowledge and understanding:

1. By the end of the course, graduates should be able to:

a. 1-Identify the basic physiological theories and principles of hepatic and biliary system function and dysfunction

a. 2- Identify the basic physiological theories and principles of gastrointestinal system function and dysfunction

a.3- Identify the basic physiological theories and principles of common endemic diseases.

a.4- Identify the basic physiological theories and principles of common infectious diseases.

a. 5- Identify the basic physiological theories and principles of general medicine.

-intellectual skills

By the end of the course, graduates should be able to:

b. 1- Analyze medical problems referring to their roots in clinicalphysiology.
b. 2-Interpret problems of hepatic and biliary system function and dysfunction in relation to clinical physiology
b. 3- Interpret problems of gastrointestinal system function and dysfunction in relation to clinical physiology
b. 4- Interpret problems of common endemic diseases in relation to clinical physiology.
b. 5-Interpret problems of common infectious diseases in relation to clinical physiology.

C-professional &practical skills

D-general transferable skills

By the end of the course, the student should be able to:

d. 1-Communicate effectively with colleagues.
d. 2-Apply different learning resources to acquire knowledge and information.
d. 3- Adopt effective practice of continuous medical education

3- Academic standards adopted

Academic standards for postgraduates by The Egyptian Authority for Quality Assurance and Accreditation for Education (NAQAAE) 2009 implemented by the faculty council for medical degree of Doctorate on 24/9/2025.

4-Course contents

Topics	Theoretical	totalcredit hour
Applied physiology	**15 (1cr)**	**1**

Detailed curriculum and logbookare annexed

5- The course topics

	Theoretical
• Hemostasis, blood coagulation, anticoagulants & hemorrhagic disorders. • Arterial blood pressure, types & pathophysiological basis of hypertension. • Shock, types & compensatory reactions. • Body temperature regulation & fever. • Gastrointestinal secretions and hormones.	**1 credit hour / 15 taught hours**

	Theoretical
• Disturbance of bilirubin metabolism & excretion. • Synthetic, inactivating & immune function of the liver & their disorders. • Gastrointestinal motility and reflexes. • Acid base balance • Water and electrolyte balance • Renal physiology • Pain • Body volume; regulation of food intake and obesity • Enteric nervous system • Gut brain axis and gut microbiota	
Total	**1 credit hour**

6-Teaching and learning methods

Methods of teaching and learning	ILOS
Lectures	**a1-6, b1-5, d1-3**

7-Student Assessment

- Final written and oral exams included in the MD first part exam.

Methods of assessment	ILOS
Written	**a1-5, b1-5**
Oral	**a1-6, b1-5**

8- Weighing assessments

Method of assessment	Marks
Written	**20marks**
Oral	**30marks**
Total	**50marks**

9- List of references:

9.1 Course notes:

9. 2 Textbooks:

- Guyton A. C.&Hall, J. E. (1996): Guyton and Hall Human Physiology and Mechanisms of Disease. 6th ed. Philadelphia Saunders
- Barrett, K., Barman, S., Yuan, J. and Brooks, H. (2019): Ganong's Review of Medical Physiology, Twenty-sixth Edition.McGraw Hill Education. USA.

9.3 Recommended books:

- Costanzo L.S. (2022): Costanzo Physiology 7th ed. Elsevier
- Widmaier, E.P., Raff, H. and Strang, K. T. (2009): Vander's human physiology, The mechanisms of body function. 15th ed. McGraw Hill Education. USA.

9.4 Periodicals and web sites

10-Other resources/ facilities required for teaching and learning to achieve the above ILOs

11- We certify that all 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.

Program coordinator: Prof. Ferial El-Kalla Signature.....

Course coordinator: Ass Prof. Nehad Hawash.Signature:....Nehad Hawash

Head of department: Prof. Dina Ziada Signature....Dina Ziada

Head of quality assurance unit: Prof. Eslam Elhawary Signature....Dr. Eslam Elhawary

وحدة ضمان الجودة
كلية الطب - جامعة طنطا