UNIVERSITY OF PATRAS
SCHOOL OF HEALTH SCIENCES
DEPARTMENT OF PHARMACY
UNDERGRADUATE STUDIES' COURSES

COURSE DESCRIPTION: **PHYSIOLOGY I**
COURSE CODE: **PHA-A25-NEW**

PHYSIOLOGY I
COURSE DESCRIPTION

1. GENERAL

SCHOOL	HEALTH SCIENCES		
SEPARTMENT	PHARMACY		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	**PHA-25-NEW**	**SEMESTER OF STUDIES**	**2nd**
COURSE TITLE	PHYSIOLOGY I		

INDEPENDENT TEACHING ACTIVITIES	**TEACHING HOURS PER WEEK**	**ECTS CREDITS**
Lectures	4	6

COURSE TYPE	Scientific Field course
PREREQUISITE COURSES:	-
TEACHING AND ASSESSMENT LANGUAGE:	Greek
THE COURSE IS OFFERED TO ERASMUS STUDENTS	Yes [Instructed/Guided self study in english for Erasmus+ Students]
COURSE WEBPAGE (URL)	http://www.pharmacy.upatras.gr/images/DS/PHA-A25-EN.pdf

2. LEARNING OUTCOMES

Learning outcomes
In general, this class ambitions to facilitate the acquisition of knowledge, skills and capabilities at the level 6 of the European Framework of Skills of Lifelong Learning. In particular, upon completion, it aims to provide students with the following: - Understand the notions of Homeostasis, Excitation and Cellular signaling, and the physiological function of distinct physiological systems in humans (Musculoskeletal, Nervous, Cardiovascular and Urinary) - Understand the basic notions of electrocardiography - Acquire a demonstrable knowledge and understanding of the knowledge area of Human Physiology, supported by the use of textbooks of advanced level and by additional data derived from recent developments at the forefront of this field. - Be able to use the acquired knowledge and understanding in a manner showing a professional approach, based on analytical and synthetic inductive use of the data provided, in combination with other areas of knowledge to which they are exposed during their studies (e.g. Anatomy, Biochemistry) - Be able to approach complex novel problems related to pathophysiological situations - Students are expected to develop the skills and knowledge needed to continue in more advanced studies with a high degree of autonomy
General Abilities
Search, analyze and synthesize data and information, using the appropriate technology tools Adapt to new situations

Decision- making
Independent work
Group work
Work in an international environment
Work in an inter-disciplinary environment
Develop critical though towards others and themselves
Development of free, creative and inductive thinking

3. COURSE CONTENT

- Basic notions of human physiology
- The acqeous environment in the body, homeostasis
- Basic cellular functions, the movement of molecules through cellular membranes
- Respiratory system mechanisms of breathing, gas exchange and movement
- Blood-forming system: Composition and function of blood, Coagulation and Hemostasis, Introduction to the Immune system
- The gastrointestinal tract: anatomical elements, secretions, digestion and absorbance of food in the GI, feeding and metabolism
- The endocrine glands/tissues and their secretory function, control of metabolism and of body growth and energy homeostasis. Reproductory functions in males and females.

4. TEACHING AND LEARNING METHODS - ASSESSMENT

TEACHING METHOD	Face-to-face
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	Use of E-class platform to communicate with students & manage their tasks Use of PCs in teaching
TEACHING ORGANIZATION	***Teaching Method*** ***Semester Workload*** Lectures 52 Personal (to each student) time for studying 98 ***Total number of hours for the Course*** **(25 hours of work-load per ECTS credit) 150**
STUDENT ASSESSMENT	Evaluation done in greek Written exam: Multiple choice questions, pairing Qs, and Qs requiring brief reasoning and justification, 100% of the final grade

5. RECOMMENDED LITERATURE

Manual/Textbook: *(*Greek translation)

BERNE AND LEVY Φυσιολογία Συγγραφείς: Koeppen, Stanton, Εκδοτικός οίκος: Παρισιάνου Ανώνυμη Εκδοτική Εισαγωγική Εμπορική Εταιρεία Επιστημονικών Βιβλίων, 2012

Ιατρική Φυσιολογία I, Boron W. & Boulpaep E., Εκδόσεις: Broken Hill Publishers Ltd, 2011

Εισαγωγή στη Φυσιολογία του Ανθρώπου. Από τα συστήματα στα κύτταρα, Lauralee Sherwood, Ακαδημαϊκές Εκδόσεις Ι. Μπάσδρα και ΣΙΑ Ο.Ε., 2016

Journals: Physiological Reviews

Sites: http://www.the-aps.org/