

Course Outline: “1104 - Human Physiology”

1. General information

FACULTY/SCHOOL	School of Physical Education, Sport Science & Dietetics		
DEPARTMENT	Department of Nutrition and Dietetics		
LEVEL OF STUDY	Undergraduate		
COURSE UNIT CODE	1104	SEMESTER	1st
COURSE TITLE	Human Physiology		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	CREDITS
Lectures		3	5
		3	5
COURSE TYPE	Background Knowledge Scientific Expertise		
PREREQUISITE COURSES	No		
LANGUAGE OF INSTRUCTION	GREEK		
LANGUAGE OF EXAMINATION/ASSESSMENT	GREEK		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	YES		
COURSE WEBSITE (URL)			

2. LEARNING OUTCOMES

Learning Outcomes
<p>The aim of the course is the understanding by the students of the structure, the organization and the physiological functions of the human body and more specific topics such as the physiology of digestion and metabolism, useful in daily practices in their professional career regarding human nutrition.</p> <p>Upon completion of the course of Human Physiology, the student will be able to:</p> <ul style="list-style-type: none"> • Understand basic concepts and terms of physiology • Be familiar with human physiology and its applications at both cellular and systemic levels • Understand how each individual system of the organism and their functions interact with each other in a way that allows them to present a complete picture regarding the physiological functions of the human body • Understand the activation of the compensatory/homeostatic mechanisms in cases of systemic dysfunction and the induction of pathological processes and diseases due to inadequate compensatory/homeostatic mechanisms. • Know ways to deal with problems related to the subject of physiology • Manage scientific research methods in the field of physiology
General Competences
<ul style="list-style-type: none"> • Acquisition of the appropriate theoretical cognitive background so that further education is possible • Search for, analysis and synthesis of data and information • Promotion of free, creative and deductive thinking • Working in an interdisciplinary environment

- Individual/Independent work

3. COURSE CONTENT

- Introduction to Physiology and Homeostasis
- Cellular Physiology
- Cytoplasmic Membrane and Membrane Potential
- Physiology of the Nervous System
- Physiology of the Muscles
- Cardiovascular Physiology
- Blood and immune system physiology
- Respiratory Physiology
- Physiology of the Urinary System
- Physiology of the Gastrointestinal System
- Physiology of the Endocrine System
- Physiology of the Reproductive System
- Energy Balance and thermoregulation

4. TEACHING METHODS - ASSESSMENT

MODES OF DELIVERY	Face-to-face	
USE OF INFORMATION AND COMMUNICATION TECHNOLOGY	-Use of PowerPoint presentation program during the educational process -Support of the Learning Process through the e-class platform -Communication with the students via email	
COURSE DESIGN	Activity/Method	Semester workload
	Lectures	40
	Study and analysis of bibliography	20
	Self-directed Study	65
	Total	125
STUDENT PERFORMANCE EVALUATION/ASSESSMENT	Written final exam (100%) which includes: - Multiple choice questions - Short-answer questions	

5. SUGGESTED BIBLIOGRAPHY

-Suggested bibliography:

- Εισαγωγή στη Φυσιολογία του Ανθρώπου - Lauralee Sherwood. Ακαδημαϊκές Εκδόσεις Μπάσδρα & Σία Ο.Ε., 2016
- Vander's Φυσιολογία του Ανθρώπου – Οι μηχανισμοί του σώματος. Widmaier P. Eric, Raff Hershel, Strang T. Kevin. Ιατρικές Εκδόσεις Πασχαλίδης, 2016
- Ganong's Ιατρική Φυσιολογία. Kim E. Barrett, Susan M. Barman, Scott Boitano, Heddwen L. Brooks, 2η Βελτιωμένη Έκδοση, Ιατρικές Εκδόσεις Πασχαλίδης, 2014

-Relative Scientific journals:

- Human Physiology, <https://link.springer.com/journal/10747>
- Journal of Applied Physiology, <https://www.physiology.org/journal/jappl>
- Journal of General Physiology, <http://jgp.rupress.org/>
- European Journal of Applied Physiology, <https://link.springer.com/journal/421>

- European Journal of Anatomy, <http://www.eurjanat.com/web/>
- Applied Physiology, Nutrition and Metabolism, <https://www.nrcresearchpress.com/journal/apnm>