

Course Unit: 9500608 – Human Anatomy and Physiology I

Year 1 Semester 1 ISCED Code: 900 ECTS: 4

Type of Course Unit: Compulsory Delivery Mode: Face-to-face Language of Instruction: Portuguese

COURSE COORDINATOR: Maria Antonieta Pereira de Carvalho da Palma Medeiros

HOURS OF WORK

TOTAL HOURS	Contact Hours								Hours in autonomous work
	Theory	Theory and practice	Practical and laboratory work	Field work	Seminar	Internship	Tutorial guidance	Other	
112	48	8					4		52

Prerequisites (if applicable): not applicable

LEARNING OUTCOMES (knowledge, skills and competence)

It is expected that the student:

- Characterize the functions and structures of the cell and the main tissues of the human body
- Understand the chemical and molecular composition of the human body and the main metabolic pathways of proteins, lipids and carbohydrates
- Know the constitution, structure, organization and functioning of the human body
- Relate the structure with the function of various organs / body systems
- Understand the mechanisms for control and integration of organic operation
- Characterize the structural and functional peculiarities of the development processes of reproduction, growth and human aging
- Apply acquired knowledge of human anatomy and physiology in the understanding of the health / illness of the person across the cycle of life

CONTENTS

Introduction to the study of human anatomy and physiology

- General aspects of the structure and functioning of the human body
- chemical and molecular composition of the human body
- Metabolism of biological molecules
- Design and function of the cell
- The body tissues
- cutaneous system
- Skeletal System
- Joints and joint movement
- Muscular System

- Female reproductive system
- Male reproductive system
- Development, growth and aging
- Genetics
- Endocrine system

DEMONSTRATION OF THE CONTENTS COHERENCE WITH THE COURSE UNIT'S LEARNING OUTCOMES

The syllabus of this course unit reflect an approach that is seen to be crucial for the knowledge and understanding of the structural and organizational aspects of the human body, the main physiological and biochemical processes organic, control mechanisms and integration of body functioning, as well as processes of reproduction, development, growth and human aging.

The focus is an anatomy and physiology approach of the human body in an integral whole, in order that students can relate the structure with the function of various organs / systems and apply the acquired knowledge in an integrated way in understanding the health / disease process the person across the life cycle.

TEACHING METHODOLOGIES

The teaching methodologies are preferably active through expository and interactive sessions, considering: oral presentation of content in dialog position, using audiovisual media, demonstration with use of anatomical models and guided search.

DEMONSTRATION OF THE COHERENCE BETWEEN THE TEACHING METHODOLOGIES AND THE LEARNING OUTCOMES

The lecture sessions introduce and propose the thematic promoting the integration of conceptual content. These will be supplemented by the demonstration sessions by using anatomical models simulate real environments and anticipate representations.

With an interactive methodology, the student will have the opportunity to participate in the discussion of the themes and clarify doubts with the teacher, and instructed the relevant information search, a student actively involved in pursuing the objectives considered for the course.

EVALUATION METHODS

individual written tests.

MAIN BIBLIOGRAPHY

- Guyton, A. C., Hall, J. E. (2011). Tratado de Fisiologia médica. 12ªed. Elsevier
- Netter, F. (2008). Atlas de Anatomia Humana. Elsevier
- Seeley, R., Tate, P., Stephens, T. D. (2005). Anatomia e Fisiologia. 6ª ed. Loures: Lusociência
- Stuart Ira Fox (2012). Human Physiology. 13th Edition. McGraw-Hill Higher Education

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