INSTITUTO POLITÉCNICO DE BRAGANÇA

Course Unit	Anatomohistophysiology II			Field of study	Health Sciences		
Bachelor in	Physiotherapy			School	School of Health		
Academic Year	2022/2023	Year of study	1	Level	1-1	ECTS credits	6.0
Type	Semestral	Semester	2	Code	9504-770-1202-00-22		

Workload (hours)	162	Contact hours	T	TP	PL	TC	S	E	OT	O
			30	-	30	-	-	-	20	-

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s): Andreia Martins Pereira

Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:
1. Acknowledges the endocrine system and knows the actions of its constituents in target tissues and organs in the human body.
2. Identifies the components of the blood and of the lymphatic system and describes their main functions
3. Recognises the components and functions of the immunity and urinary systems and understands their role in homeostasis.
4. Identifies the components of the digestive system, understands their roles, the major nutrients and metabolic processes for energy production and processes that regulate body temperature in human
5. Identifies the structures that comprise the human male and female reproductive systems,their physiology and knows the main stages of human development (from fertilization to postnatal period).
6. Identifies and locates the macro and microscopic structures of the Central and Peripheral N.System, relating them with its main functions acknowledges the anatomical and functional structure of the ANS
7. Knows the structures that make up the male and female reproductive systems, understands their functioning and knows the main stages of human development (from fertilization to postnatal period)

Prerequisites

Before the course unit the learner is expected to be able to:
none

Course contents

1.Integration and Control: Endocrine system.
2.Regulation and Maintenance: Linfatic system and the immune system, respiratory and urinary systems.
Body fluids and acid-base balance. Digestive system, metabolism, and body temperature regulation..Reproduction and Development: Reproductive System; Introductory concepts of genetics, development and growth.4.Relates the main structures of the Central and Peripheral Nervous System with their functions; sensory and motor pathways;Autonomic Nervous System

Course contents (extended version)

1. URINARY SYSTEM
   - Kidney, ureter, urinary bladder and urethra
   - Physiology of renal tissue
   - Regulation and maintenance of the urinary system, body fluids and acid-base balance.
2. REPRODUCTIVE SYSTEMS
   - Ovary, uterine tubes, uterus and vagina, female external genital structures
   - Sexual cycle
   - Testes, epididymi, ductus deferens, seminal vesicles, ejaculatory ducts, prostate, male genitalia
   - Reproduction and Development: notions of development (germ, embryonic and fetal) and growth.
3. ENDOCRINOLOGY
   - Hipothalamus-hypophysis system.
   - Functional organization, glands and organs with secretion endocrine; major hormones, heir effects
4. NERVOUS SYSTEM
   - Physiology, membrane potentials; Central Nervous System; Peripheral.
   - Nervous System; Autonomous Nervous System; Senses; functional integration.
5. DIGESTIVE SYSTEM
   - Digestive system, metabolism and body temperature regulation
6. IMMUNE SYSTEM AND LYMPHATIC
   - Regulation and Maintenance of the Immune System (organization functional and anatomical)
   - Identifies the components of the blood and lymphatic system and knows their main functions.

Recommended reading

1. -Drake RL, Vogl AW, & AWM, Mitchell (Eds.). (2010). Gray's Anatomia para Estudantes (2ª ed.): Rio de Janeiro: Editora Elsevier
2. -Netter FH (Ed.). (1987). Anatomia y Fisiologia. Colección CIBA de Ilustraciones Médicas. : Barcelona: Salvat Editores.
3. -Junqueira, L. C. , & Carneiro, J. (Eds.). (1999). Histologia Básica (9ª ed.): Rio de Janeiro: Guanabara Koogan.
4. -Berne, R. M. , & Levy, M. N. (Eds.). (2004). Fisiologia. (5ª ed.): Rio de Janeiro: Mosby.
5. -Haines, D. E. (Ed.). (2006). Neurociência Fundamental. (3ª ed.): Rio de Janeiro: Churchil Linvingstone Elsevier.

Teaching and learning methods

Teaching methodology: Theoretical classes and practical laboratory classes (anatomy and physiology), that occur in specific rooms equipped with anatomic models and informatics media.

Assessment methods

1. Continuous evaluation - (Regular, Student Worker) (Final)
   - Intermediate Written Test - 45%
   - Intermediate Written Test - 45%
   - Practical Work - 10%
2. Alternative 3 - (Regular, Student Worker) (Supplementary)
   - Final Written Exam - 100%
3. Alternative 4 - (Regular, Student Worker) (Special)
   - Final Written Exam - 100%

Language of instruction

Portuguese

Electronic validation

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02-08-2023	02-08-2023	02-08-2023	02-08-2023