



Course Descriptor AHND210 - Human Anatomy and Physiology

Proposed Academic Year	2021-22	Last Reviewed Academic Year	2019-20
Course Code	AHND210	Course Title	Human Anatomy and Physiology
Credit hours	3	Level of study	Undergraduate
College / Centre	CAHS	Department	FSHN
Co-requisites		Pre-requisites	BIOL101

1. COURSE OUTLINE

[The course is designed to provide the students applied scientific disciplines with knowledge about the normal function and mechanism of various physiological and systems basis on the anatomical and histological correlation, including: cells physiology and body fluid, membranes physiology, nerves and muscles, contractions of skeletal muscles, excitation contraction coupling, Neuromuscular transmission, Autonomic nervous system, Sensory nervous system, Cardiovascular system, Digestive system, Respiratory system, and Reproductive system.

2. AIMS

The aim of this module is to familiarize the student with the anatomical structure and physiological function of normal tissues in the body. The modules will introduce students to: the function of various body systems, the normal secretion of the cells such as hormones, enzymes and chemotactic substances, the body fluid & hemodynamic, the body thermal regulation, and the nerve impulses.

3. LEARNING OUTCOMES, TEACHING, LEARNING and ASSESSMENT METHODS

Learning Outcomes (Definitive)	Teaching and Learning methods (Indicative)	Assessment (Indicative)
Upon successful completion of this course, students will be able to:		
1. Identify the anatomical and histological structure of selected body tissue/ organ and Relate the function of the tissue to its structure.	Lectures and presentations	in-class tests, quizzes
2. Recognize the importance of keeping normal physiological activities of various body tissues and evaluate the physiological concepts.	Lectures and presentations	Quiz, Writing report from specialized journals
3. Gain an understanding of the concentrations of electrolytes in body fluid and the way of hemodynamic and perform critical evaluation of the	Lectures and presentations	Quiz, Case study report



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neuromuscular function, impulses and reflexes.		
4. Identify the anatomy of various body organs according their body systems.	Lectures and presentations	Class Presentation and Written Examination

4. ASSESSMENT WEIGHTING

Assessment	Percentage of final mark (%)
Quizzes	20%
Mid-term Exam	20%
Assignments, , Reports, Class activates and presentation	20%
Final Examination	40%
TOTAL	100%

5. ACHIEVING A PASS

Students will achieve **03** credit hours for this course by passing **ALL** of the course assessments [*alternatively, list the compulsory pass assessments**] and achieving a **minimum overall score of 50%**

NB *Ensure that ALL learning outcomes are taken into account

6. COURSE CONTENT (Indicative)

Introduction to the course. The human body: An Orientation. An Overview of Anatomy & Physiology. Histology of Tissues.
The Skelto- muscular system: Axial bones, appendicular bones, joints, Skelton muscles, smooth muscles, tendons, ligaments and fascia.
Blood: Composition, functions, blood cells, blood plasma. The Cardiovascular system: Heart anatomy and function, Blood Vessels structure and function, Physiology of circulation.
The lymphatic system: lymphatic vessels, lymph nodes, spleen, thymus, tonsils, Immune system & Immunity.
The Urinary system: Kidney anatomy and physiology. Mechanisms of urine formation. Anatomy of Ureters, Urinary bladder & Urethra. Urine: physical characteristics & chemical composition. Fluid, Electrolytes & Acid-Base Balance.
The Respiratory system: Functional anatomy and physiology. Mechanics of breathing & control of respiration. Gas exchange between the blood, lungs and tissues.
The Digestive system: Functional anatomy and physiology.



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Basic functional concepts. Physiology of digestion and absorption	
The Nervous system: Functional anatomy and physiology. Neurophysiology & reflex activity.	
The Respiratory system: Functional anatomy and physiology. Mechanics of breathing & control of respiration. Gas exchange between the blood, lungs and tissues.	
The special senses: Vision, Hearing and Balance, Taste and Smell. The skin: anatomy & physiology. The mammary glands physiology.	
The Endocrine system: Major endocrine organs & hormone secretion.	
The Reproductive system anatomy and physiology.	
TOTAL HOURS	45
Plus RECOMMENDED INDEPENDENT STUDY HOURS	15
TOTAL COURSE HOURS	60

7. RECOMMENDED REFERENCES

Core text/s:

Gerard J. Tortora & Bryan H. Derrickson (2015). Principles of Anatomy & Physiology, Volume 1 & 2, 13th eds. John Wiley & Sons.

Recommended Reading:

1. Kapit, W. & Elson, L. (2002). The Anatomy Coloring book, 3rd edition, Benjamin Cummings.
2. Young, B. & Heath J. W. (2006). Wheater's Functional Histology: A Text and Color Atlas. 5th Edition, Churchill Livingstone, London

Library + online resources:

Open Educational Resources: