Institute for Education, Martin Luther King Road, Pembroke PBK 1990. Tel: +35625982001 | Email: ife@ilearn.edu.mt

BHSC202 Anatomy and Physiology in Health and Social Care

ECTS Value: 7 ECTS
Self-Study Hours: 84

Contact Hours: 35
Assessment Hours: 56

Module Description

The main aims of this module are to gain knowledge of the structure and function of the human body. Course participants will be able to name the major human body systems and relate their functions. They will be able to describe the anatomical locations, structures and physiological functions of the main components of each major system of the human body, including: the integumentary system, respiratory system, nervous system, endocrine system, musculoskeletal system, cardiovascular system, reproductive system, digestive system, lymphatic and urinary system. It will prepare course participants to know how, when and why vital signs are taken and how to report and chart these procedures. Upon completion, candidates should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.

Overall Objectives and Outcomes

By the end of this module, the learner will be able to:

Competences

a. Develop an understanding of the organization of the body highlighting relationships between structure and function;
b. Develop an understanding of the effects of specific diseases and disorders associated with the physiological processes of the different body systems;
c. Support students' practice in the safe and hygienic use of health and social care equipment and practices;
d. Create resources to communicate effectively to students to explain the concepts of anatomy and physiology.

Knowledge

a. Identify the morphological characteristics of mammalian cell types;

b. Identify the different types of tissues found in the human body, relating structure to their biological functions;

c. List the anatomical locations, structures and physiological functions of the main components of each major system of the human body;

d. Define the basic functions of the human physiological systems;

e. Define the homeostatic mechanisms of each organ system;

f. Outline the structure and functions of the:

   i. integumentary system
   ii. nervous system
   iii. endocrine system
   iv. reproductive system
   v. urinary system
   vi. cardiovascular system
   vii. respiratory system
   viii. lymphatic system
   ix. digestive system
   x. musculoskeletal system;

g. Discuss the interactions between the following systems of the body:

   i. Cardiovascular and respiratory system
   ii. Endocrine and nervous system;

h. Discuss the nature and the physiological roles of the principal hormones associated with the endocrine and reproductive system;

i. Describe what is meant by vital signs, their purpose, and observations made while performing the procedures;

j. Describe basic measures to raise and lower the temperature of the body;

k. Describe factors that increase and decrease pulse, and the qualities to observe in taking a pulse;

l. Define the factors that affect respiratory rate and the observations to be made when taking such measurements;

m. Define what happens in the circulatory system to produce blood pressure;

n. Identify factors that increase or decrease blood pressure.

Skills

a. Demonstrate knowledge and understanding of the:

- integumentary system
- musculoskeletal system
- nervous system
- endocrine system
- cardiovascular system
- respiratory system
- lymphatic system
- urinary system
- digestive system
- reproductive system;

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b. Demonstrate the techniques used to accurately measure temperature, blood pressure, pulse and breathing rate;
c. Use different tools and equipment in relation to measuring the vital signs;
d. Demonstrate knowledge of recording vital signs on chart.

Mode of Delivery

This module adopts a Blended Approach to Learning. Information related to the structure and delivery of the module may be accessed through the IfE Portal. For further details, kindly refer to the Teaching, Learning and Assessment Policy and Procedures found on the Institute for Education's website.

Assessment Methods

This module will be assessed through: Practical Tasks, Assignment and Presentation.

Suggested Readings

1. Solomon, EP. (2015). Introduction to Human Anatomy and Physiology (4th edition). Philadelphia, USA: Elsevier Health Sciences.
2. Tucker, L. (2011). An Introductory guide to Anatomy and Physiology. UK: EMS Publishing.
3. Haroun, L. & Royce, S. (2004). Teaching Ideas and Activities for Health Care. Albany, NY. Delmar Publishers.

Supplementary Reading List

1. Wirhed. R. (2006) Athletic ability and the anatomy of motion (3rd edition). Mosby Elsevier. Edinburgh.
2. Campbell, Reece, Taylor, Simon, Dickey 2009, Biology, Concepts and Connections, 6th Ed., Chapter 20 - 30, Pearson Benjamin Cummings.
3. Merrill, Gary 2008, Our Marvelous Bodies: An Introduction to the Physiology of Human Health, eBook Ed., Rutgers University Press.
4. Acello, B. & Hegner, B. (2016). Nursing Assistant: A Nursing Process Approach. (11th ed). Boston, MA. Cengage Learning.

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