Course Specifications

General Information

Course name	General Physiology
Course number	MDCN1322
Faculty	
Department	
Course type	College Needs
Course level	1
Credit hours (theoretical)	3
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

1 - Demonstrate an understanding of fundamentals and principles of physiology

2 - develop a solid foundation of knowledge regarding the structure and function of major organ systems, including the cardiovascular, respiratory, nervous, muscular, digestive, renal, endocrine, and reproductive systems

3 - Acquire the ability to analyze and interpret physiological processes, including the mechanisms underlying cellular transport, neural signaling, muscle contraction, and other key physiological functions

Intended Learning Outcomes

Knowledge and Understanding

* Understand the fundamental principles: Gain a solid understanding of the basic principles and concepts of physiology, including the organization and functions of cells, tissues, and organs within the human body.
* Explain the membrane dynamics and transport process, communication, integration, and homeostasis
* 3- Describe the structure of major human organs and explain their role in the maintenance of healthy individuals.
* 4- Explain the interplay between different organ systems and how organs and cells interact to maintain biological equilibria in the face of a variable and changing environment
* 5- Discuss the principles of regulation and integration of the body including the fundamentals of nervous tissue and the nervous system covering the central/peripheral and somatic/autonomic nervous systems; synapsis, nerve impulse and action potential, and sensory physiology.
* 6- Explanation for muscles structure and sliding filament theory, action potential in smooth, skeletal and cardiac muscle.

Course Contents

1 - This course introduces to membrane dynamics and transport process, communication, integration, and homeostasis, the principles of regulation and integration of the body including the fundamentals of nervous tissue and the nervous system covering the central/peripheral and somatic/autonomic nervous systems; synapsis, nerve impulse and action potential, and sensory physiology. an explanation for muscles structure and sliding filament theory, action potential in smooth, skeletal and cardiac muscle. action potential in special sense; vision, hearing, smell, taste.

Teaching and Learning Methods

1 - Lectures

2 - PowerPoint Presentations

3 - Group Discussions

Students Assessment

Assessment Method	TIME	MARKS
Quizzes	30	20
Midterm	60	30
Final	120	50

Books and References

Essential books	Hall, J. E. (2021). Guyton and Hall textbook of medical physiology. 14 ed, Elsevier Health Sciences. Chicago