Course Specifications

General Information

Course name	Physiology
Course number	BIOL4333
Faculty	
Department	
Course type	College Needs
Course level	4
Credit hours (theoretical)	2
Credit hours (practical)	1
Course Prerequisites	

Course Objectives

1 - To understand the differences between Physiology and Molecular Interactions, Membrane Dynamics, Communication, Integration, and Homeostasis. To understand the basic functions of the Endocrine System, Nervous system, synapsis, nerve impulse and action potential, and Sensory Physiology. To learn the explanation for Muscles and sliding filament theory, Cardiovascular Physiology, Blood Flow, conduction system and ECG. To discuss the Mechanics of Breathing, Gas Exchange and Transport. The Kidney, Fluid and Electrolyte Balance and mechanism of urine formation, The Digestive System and mechanism of digestion. The Immune System, Reproduction and Development

2 - To understand the basic functions of the Endocrine System, Nervous system, synapsis, nerve impulse and action potential, and Sensory Physiology.

3 - To learn the explanation for Muscles and sliding filament theory, Cardiovascular Physiology, Blood Flow, conduction system and ECG.

4 - To discuss the Mechanics of Breathing, Gas Exchange and Transport. The Kidney, Fluid and Electrolyte Balance and mechanism of urine formation, The Digestive System and mechanism of digestion. The Immune System, Reproduction and Development

Course Contents

1 - The course provide an introduction to Physiology and Molecular Interactions, Membrane Dynamics, Communication, Integration, and Homeostasis. This course include also, introduction to the Endocrine System, Nervous system, synapsis, nerve impulse and action potential, and Sensory Physiology. An explanation for Muscles and sliding filament theory, Cardiovascular Physiology, Blood Flow, conduction system and ECG. The course discuss the Mechanics of Breathing, Gas Exchange and Transport. The Kidney, Fluid and Electrolyte Balance and mechanism of urine formation, The Digestive System and mechanism of digestion. The Immune System , Reproduction and Development.

Teaching and Learning Methods

1 - Lectures

2 - Student presentation

3 - Revision and Discussion sections

Teaching and Learning Methods for the Disabled Students

1 - Will be treated and addressed individually according to the type of disability.

Students Assessment

Assessment Method	TIME	MARKS
first hour exam	60 min	20
practical part	60 min	30
final exam	120minutes	50

Books and References

Essential books	Vander et al.: Human Physiology: The Mechanism of Body Function, Eighth Edition, The McGraw?Hill Companies, 2001